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PLUTARCH'S MORALIA

XII

PLUTARCH'S MORALIA

WITH AN ENGLISH TRANSLATION BY

HAROLD CHERNISS

THE INSTITUTE FOR ADVANCED STUDY, PRINCETON, N.J.

AND

WILLIAM C. HELMBOLD

UNIVERSITY OF CALIFORNIA

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PREFACE

To prevent misunderstanding the editors wish to make it clear that the essays contained in this volume are not works of collaboration. Mr. Cherniss is entirely responsible for the text and translation of the first essay (pp. 1-223), Mr. Helmbold for all the rest of the volume.

THE TRADITIONAL ORDER OF THE BOOKS of the *Moralia* as they appear since the edition of Stephanus (1572), and their division into volumes in this edition.

THE TRADITIONAL ORDER

CONCERNING THE FACE WHICH APPEARS IN THE ORB OF THE MOON

(DE FACIE QUAE IN ORBE LUNAE APPARET)

INTRODUCTION

1. The authenticity of this dialogue has sometimes been questioned but without any plausible reason.[a] On the other hand, despite statements to the contrary, it is certainly mutilated at the beginning,[b] although one cannot tell whether much or little has been lost ; this follows not merely from the abruptness of the opening as we have it, the lack of any kind of introduction, and the failure to identify the main speaker until two-thirds of the dialogue have been

[a] *Cf.* S. Günther, quoted by M. Adler, *Diss. Phil. Vind.* x (1910), p. 87, and R. Pixis, *Kepler als Geograph*, p. 105. Wilamowitz (*Commentariolum Grammaticum*, iii, pp. 27-28) suggested that the dialogue was published under the name of Lamprias ; and this notion that Lamprias was in some sense either the real or the reputed author was adopted by Christ in the third edition of his *Geschichte der griechischen Litteratur* (1898), p. 662, and by Hirzel (*Der Dialog*, ii, p. 185).

[b] Mutilation was assumed by Xylander, Kepler, and Dübner and has been reasserted by Pohlenz (*B.P.W.* xxxii [1912], pp. 649-650), von Arnim (*Plutarch über Dämonen und Mantik*, p. 38), Raingeard (*Le* ΠΕΡΙ ΤΟΥ ΠΡΟΣΩΠΟΥ *de Plutarque*, pp. 49-50 on 920 B 1), and K. Ziegler (*Plutarchos von Chaironeia*, 214). It was denied by Wilamowitz (*loc. cit.*), Hirzel (*Der Dialog*, ii, p. 186, n. 6), and M. Adler (*Diss. Phil. Vind.* x, pp. 88-89). Wyttenbach contended that "either nothing or no great part" had perished.

finished, but even more surely from the nature of the text in the opening sentences.[a]

2. In the dialogue as it stands the first speaker is Sulla. His chief function is to recount the myth which he mentions in the first extant words and which occupies the final fifth of the work ; but he interrupts the dialogue proper at 929 E—930 A to ask whether a certain difficulty was treated in the discussion which Lucius is reporting. He is a Carthaginian (*cf.* 942 C), presumably the Sextius Sulla cited by Plutarch in his *Romulus*, chap. 15 (26 C), and the same as the Carthaginian Sulla who gave a dinner for Plutarch in Rome (*Quaest. Conviv.* 727 B). He is probably the Sulla who appears as the interlocutor of Fundanus in the *De Cohibenda Ira* (note *b*, 453 A) but probably not the same as the Sulla of *Quaest. Conviv.* 636 A (ὁ ἑταῖρος) and 650 A (one of τῶν συνήθων).

The second speaker, at once the narrator of the whole conversation and the leader of the dialogue

[a] Those who have defended ὁ μὲν οὖν Σύλλας 'ταῦτ'' εἶπε 'τῷ γ' ἐμῷ μύθῳ προσήκει κτλ. as a possible opening apparently were unaware that the reading of E is 'Οαυνοσυλλας ταῦτα εἶπε. τῷ γὰρ ἐμῷ μύθῳ προσήκει κτλ. and that B's ὁ μὲν οὖν Σύλλας is in all probability a conjecture made by the scribe of that MS. This being so, it is unjustifiable to "emend" the γὰρ of τῷ γὰρ ἐμῷ μύθῳ, the reading of both E and B ; and, if this γὰρ stands, it is certain that our MSS. do not preserve the beginning of the dialogue. The next sentence, ἀλλ' εἰ δεῖ τι . . . προσανακρούσασθαι, πρῶτον ἡδέως ἂν μοι δοκῶ πυθέσθαι, which Wyttenbach needlessly "emended," implies that some introduction of Sulla and his myth preceded the present beginning ; and 937 C (. . . Σύλλαν . . . οἷον ἐπὶ ῥητοῖς ἀκροατὴν γεγενημένον) suggests what the nature of this introduction may have been. Even the tense of τί δ' οὐκ ἐμέλλομεν implies some preceding reference to an earlier conversation or a conversation itself interrupted by the arrival of Sulla.

proper, is Lamprias,[a] who is also the narrator of the *De Defectu Oraculorum* (*cf.* 413 D), a dialogue in which he plays the leading rôle.[b] In the *De E apud Delphos*, where Lamprias appears with Plutarch, Plutarch calls him brother (385 D) ; and he is frequently identified as Plutarch's brother in the *Quaest. Conviv.* (*cf.* 635 A, 726 D-E, 744 C [with 745 A], and possibly 626 A). He is characterized as a wit and a tease (726 D-E, 740 A), one accustomed to speak out in a loud voice (617 E-F), and capable of inventing a story as evidence to support his argument (*De E* 386 A) ; he is an expert in culinary matters (643 E, 669 C, 670 E) and in the dance (747 B) and shrinks from appearing as a kill-joy to younger men (704 E). He is made to emphasize his close relations with a Cynic (*De Defectu Oraculorum*, 413 B) ; but he is no Cynic himself, and he is mortified to think that he might be supposed to have used his skill in argument to discredit any pious belief (435 E). He is said to honour the school of Aristotle above that of Epicurus (*Quaest. Conviv.* 635 A-B) ; but he does not hesitate to disagree with Aristotle in the *De Defectu Oraculorum* (424 C ff.) and to espouse against him the doctrine of the Academy (430 E ff.). In the *De Facie* he is a vehement critic of Stoic doctrine and a supporter of the Academic position (*cf.* 922 F). Lamprias bore the name of his grandfather ; but this

[a] His name is not mentioned until 937 D. There at the beginning of a section which serves as the transition from the main or "scientific" part of the dialogue to the myth Theon calls Lamprias by name, as Sulla does also at the beginning of his myth (940 F) and at the end of it (945 D). It is probable that in the lost beginning of the work Lamprias was similarly identified.

[b] *Cf.* Flacelière, *Plutarque : Sur la Disparition des Oracles* (Paris, 1947), pp. 19-22.

does not prove, as has sometimes been asserted, that he was older than his brothers, Plutarch and Timon. *De Defectu Oraculorum*, 431 c-d, has been thought to show that he was a priest of the oracle in Lebadeia,[a] though this is not a necessary implication of that passage ; and a Delphic inscription proves him to have been an archon at Delphi towards the end of Trajan's reign or in the beginning of Hadrian's.[b]

Apollonides, the third speaker, is at once identified as expert in geometry (920 f), and Lamprias indicates that the scope and limitations of his specialty coincide with those of Hipparchus, the great astronomer (921 d, *cf.* 925 a). He puts forward objections to Lamprias's explanation of the " face " based upon astronomical terminology and calculations (933 f, 935 d-e). An Apollonides appears at *Quaest. Conviv.* 650 f along with Sulla ; but he is called ὁ τακτικὸς Ἀπολλωνίδης, and there is no compelling reason to identify the two.[c] Prickard may well be right in saying that the name Apollonides here was used by Plutarch to mean " one of the clan of Apollonius," *i.e.* a mathematician who, like Apollonius,[d] is interested in astronomical theory.

[a] Hirzel, *Der Dialog*, ii, p. 189, n. 3 ; Flacelière, *op. cit.* p. 251, n. 233 : Ziegler, *Plutarchos von Chaironeia*, 10.

[b] Dittenberger, *S.I.G.* ii. 868 c, n. 6 ; Stein, *R.E.* xii. 1. 586, *s.v.* Λαμπρίας 4.

[c] Ziegler (*Plutarchos von Chaironeia*, 34) says that the sentence at 927 b, οὐ γὰρ ἐν στρατοπέδῳ τακτικῶν ὄφελος κτλ., is spoken " obviously with reference to the interlocutor Apollonides " ; but this is pretty obviously not true. Lamprias is not here speaking in answer to Apollonides ; and his subsequent words, οὐδὲ κηπουρῶν οὐδ' οἰκοδόμων, certainly have reference to none of the present company. These are in fact stock examples of the argument from design.

[d] Apollonius of Perga ; *cf.* Hultsch, *R.E.* ii. 151-160.

Certainly Aristotle, who puts forward the orthodox Peripatetic theory of the heavenly bodies (928 E ff.), is only a name chosen by Plutarch to signify the school that he represents (*cf.* 920 F), even as the representative Epicurean in *De Sera Numine Vindicta* is called Epicurus.[a]

The Stoic position is represented by Pharnaces. This name was borne by the son of Mithridates, of whom Plutarch tells in the Lives of Pompey and Caesar, as well as by several notable Persians mentioned by Herodotus and Thucydides [b]; and Plutarch probably chose it for his Stoic because of its Asiatic sound.[c]

After the rôle of Lamprias the largest in the dialogue proper is that of Lucius, who is probably the same as " Lucius, the pupil of Moderatus the Pythagorean, from Etruria," a guest at the dinner which Sulla gave for Plutarch in Rome (*Quaest. Conviv.* viii. 7-8 [727 B ff., 728 D ff.]).[d] Early in the dialogue (921 F) Lamprias turns to Lucius for aid; he seems to think it appropriate that Lucius should set forth the strict " demonstration " of the Academic theory concerning

[a] There is no reason to change Ἐπίκουρος of the MSS. in 548 A to Ἐπικούρειος, as Fabricius did. " Aristotle " here supports " Epicurus " there.

[b] There was also a city in Pontus named Pharnaceia (*Lucullus*, 17 [502 F]).

[c] Hirzel (*Der Dialog*, ii, p. 186, n. 4) says that Pharnaces is certainly a former slave, one who had shared the fate and sentiments of Epictetus. This, of course, is the merest fancy; not all Asiatics, not even all in Rome at this time, had been slaves. For Athenians named Pharnaces *cf. I.G.* ii^2. 1039. 84 and 202. 55.

[d] Another Lucius, the son of Florus, appears in *Quaest. Conviv.* vii. 4 [702 F]); *cf.* Ziegler, *Plutarchos von Chaironeia*, 55.

the moon (*cf.* 928 D-E) ; and in fact the statement and defence of this position are shared by the two of them.[a]

Theon, whom Lamprias asks to identify a quotation (923 F) and whom he later teases for admiring Aristarchus to the neglect of Crates (938 D), is recognized as the literary authority in the group (*cf.* 931 E, 940 A). He is probably to be identified with Θέων ὁ γραμματικός, who was a guest at Sulla's dinner along with Lucius (*Quaest. Conviv.* 728 F) and who also dined with Plutarch at the house of Mestrius Florus (*Quaest. Conviv.* 626 E).[b] In the *De Facie* his chief contribution is a speech (937 D—938 C) which he makes after the main part of the dialogue has been concluded and which Lamprias praises as a kind of relaxation after the seriousness of the scientific discussion.

The last of the persons present is Menelaus the mathematician. Lucius addresses him directly once (930 A), but Menelaus makes no reply and neither speaks nor is spoken to elsewhere in the dialogue as we have it.[c] He is not mentioned anywhere else by Plutarch either ; but he is probably meant to be the Menelaus of Alexandria whom Ptolemy once calls

[a] It is Lucius who demands that the Stoic theory should not be passed over without refutation (921 F). It is he who replies when Pharnaces complains of Lamprias's violent treatment of the Stoics (922 F). His speeches extend from 922 F to 923 F, where Lamprias takes over to give him time to collect his thoughts, from 928 F to 929 E, from 930 A to 931 C, and from 931 D to 933 E.

[b] This Theon, whose home was Egypt (*cf.* 939 C-D), is certainly not the same as Θέων ὁ ἑταῖρος (*Quaest. Conviv.* 620 A, *De E*, 386 D), who is probably the Theon of *De Pythiae Oraculis*, *Non Posse Suaviter Vivi*, and *Quaest. Conviv.* 667 A and 726 A ff.

[c] Unless the plural ὑμῖν used twice by Lamprias at 939 C-D is meant to include Menelaus as well as Theon ; *cf.* note *a* on p. 170 *infra*.

ὁ γεωμέτρης and twice cites for astronomical observations which he made at Rome in the first year of Trajan (A.D. 98).[a]

3. From 937 C-D it follows that the interlocutors have hitherto been promenading as they talked and that now they sit down upon the steps, seats, or benches (ἐπὶ τῶν βάθρων) and remain seated to the end. No other indication of the scene or location is given in the work as we have it. It had generally been assumed that the dialogue was meant to take place in Chaeronea [b]; but nothing in the text requires this, and F. H. Sandbach has adduced strong arguments for believing that the dramatic location is Rome or the vicinity of Rome.[c] The persons in the dialogue furnish one of these arguments. Apollonides, Aristotle, and Pharnaces occur nowhere else in Plutarch's writings and are probably all fictitious

[a] Ptolemy, *Syntaxis*, vii. 3 (ii, p. 30. 18 ff. and p. 33. 3 ff. [Heiberg]); *cf.* Orinsky, *s.n.* "Menelaos" 16 in Pauly-Wissowa, *R.E.* xv. 1. 834 f.

[b] *Cf.* Hirzel, *Der Dialog*, ii, p. 184, n. 1, who discusses and rejects the suggestion that the scene is Delphi. Raingeard in his note on 939 C (p. 129 of his commentary) says that ὥσπερ ἄνω περὶ Θήβας there would allow the inference that the speakers are on the coast of Egypt. No such inference is justified by this phrase, of course; in fact, the preceding ὕλην δὲ καὶ καρποὺς αὐτοῦ (or αὐτόθι, as Raingeard conjectures) μὲν ὄμβροι τρέφουσιν and the subsequent παρ' ὑμῖν ἐν Αἰγύπτῳ (939 D 1) show that the scene of the dialogue is not anywhere in Egypt.

[c] F. H. Sandbach, "The Date of the Eclipse in Plutarch's *De Facie*," *Class. Quart.* xxiii (1929), pp. 15-16; *cf.* Ziegler, *Plutarchos von Chaironeia*, 73-74. I am indebted to Mr. Sandbach for sending me, along with copies of his publications, many of his unpublished opinions concerning points in the *De Facie* and copies of his correspondence with J. K. Fotheringham occasioned by the publication of the article cited above.

characters. Plutarch nowhere else mentions Menelaus the mathematician either, but we know that Menelaus spent some time in Rome (see note *a*, p. 8). Sulla, Lucius, and Theon all appear together at a dinner given for Plutarch when he had returned to Rome after an interval of absence (*Quaest. Conviv.* viii. 7-8) ; and none of these three is ever mentioned as being anywhere but in Rome or its vicinity (see § 2, *supra*). Lamprias alone belongs to Plutarch's circle at Chaeronea ; but it is by no means certain that he did not visit Rome as Plutarch did, though there seems to be no definite evidence either way.[a]

The other argument for the dramatic location is connected with the question of the dramatic date of the dialogue. At 931 D-E Lucius refers to a recent total solar eclipse, saying : " if you will call to mind this conjunction recently which, beginning just after noonday, made many stars shine out from many parts of the sky . . ."[b] Ginzel[c] identified this eclipse with the one which occurred on 20 March A.D. 71, for he found that all other solar eclipses visible in Chaeronea during Plutarch's lifetime fell too far short of totality to permit the appearance of

[a] Lamprias at least pretends to be conversant with Latin (*Quaest. Conviv.* 726 E ff.). On Plutarch's visits to Rome *cf.* Ziegler, *Plutarchos von Chaironeia*, 19-20.

[b] . . . δότε μοι, ταύτης ἔναγχος τῆς συνόδου μνησθέντες ἣ πολλὰ μὲν ἄστρα πολλαχόθεν τοῦ οὐρανοῦ διέφηνεν εὐθὺς ἐκ μεσημβρίας ἀρξαμένη. . . .

[c] F. K. Ginzel, *Spezieller Kanon der Sonnen- und Mondfinsternisse für das Ländergebiet der klassischen Altertumswissenschaft* (Berlin, 1899), pp. 202-204 ; *cf.* also Plates X and XI for the paths of solar eclipses during the first and second centuries A.D. The data for the eclipses of 75 and 83, *infra*, come from Ginzel's tables, *op. cit.* p. 78 and pp. 110-111.

stars. His conclusion was generally accepted [a] until Sandbach [b] pointed out that, since this eclipse reached its maximum phase at about 11 A.M. local solar time in Chaeronea,[c] Plutarch could not have referred to it as having begun after noonday. Ginzel had assumed that the place of observation was Chaeronea; Sandbach, having recognized that this assumption is unwarranted, was able to consider two other eclipses, that of 5 January A.D. 75 and that of 27 December A.D. 83. The latter was total at Alexandria shortly before 15 hours. The former was total in Carthage a little after 15 hours and in the latitude of Rome on the eastern side of the Adriatic at about 15 hours, 20 minutes; at Rome itself the maximum obscuration was 11·5 digits, so that, since according to Fotheringham [d] stars other than Venus have been visible where the solar obscuration was 10·7 digits, it is perfectly possible that some stars

[a] Struyck (cited by Ginzel, *op. cit.* p. 203) appears to have come to this conclusion before Ginzel; and Ginzel's identification was accepted by M. Adler (*Zwei Beiträge zum plutarchischen Dialog, De Facie* [Nikolsburg, 1910], p. 4) and by Fotheringham as cited by A. O. Prickard (*Plutarch on the Face of the Moon* [1911], p. 75, and *Plutarch, Select Essays*, ii, p. 253). Hirzel (*Der Dialog*, ii, p. 182, n. 1), following Volkmann, does not even mention the eclipses of 59, 71, and 75, which Ginzel held to be the only ones worthy of consideration.

[b] *Op. cit.* in note *c*, p. 8 *supra*.

[c] 10^{hr}, 58^{m}, 4 according to Ginzel (*op. cit.* p. 204): 11^{hr}, 4^{m}, 1 according to Fotheringham as quoted by Prickard (*Plutarch, Select Essays*, ii, p. 253).

[d] *Historical Eclipses* (1921), cited by Fotheringham in a letter to Sandbach (22 January 1929); in this letter Fotheringham states that "a certain number of stars were visible at Rome in 75." *Cf.* Ginzel, *op. cit.* p. 14: "Bei den zentralen Sonnenfinsternissen . . . einzelne Sterne treten mitunter hervor, bevor die Phase 11 zöllig geworden ist."

would have been seen at Rome about 3.20 P.M. local solar time on 5 January A.D. 75. This eclipse of A.D. 75 as seen in Rome certainly fits the conditions of Lucius' statement better than does the one of A.D. 71 as seen in Chaeronea, even though it was rather late to be described as beginning just after noonday.[a] It must be emphasized that there is no reason to assume that Plutarch himself saw the eclipse to which Lucius refers. He had undoubtedly heard that it had been seen in or near Rome; he almost certainly had seen the eclipse of A.D. 71 in Chaeronea and *may* have seen that of A.D. 83 in Alexandria[b]; and what he had seen during one or both of these eclipses he may very well have applied to the eclipse of A.D. 75, which he had not seen.[c] We

[a] Its "beginning," which would have been at approximately 13.50 hours, could not have been observed with the naked eye; but Plutarch was capable of calculating it roughly. In any case, whether the *συνόδου . . . ᾗ . . . ἀρξαμένη* is to be taken strictly or in the sense of the time when darkness began, *μεσημβρία*, as Sandbach has said, is an extended period of time and not an astronomical moment; and Lucius means that the conjunction began just after noonday was over.

[b] We do not know when Plutarch visited Alexandria. In *Quaest. Conviv.* v. 5 (678 C ff.) his grandfather is present at a banquet given for him after his return from Alexandria. Sandbach (*loc. cit.*) thinks that this could have been after 83; but, whether this is so or not, we do not know whether there may not have been more visits to Alexandria than this one.

[c] If 932 B (. . . *περιφαίνεταί τις αὐγὴ περὶ τὴν ἴτυν* . . .) means, as has sometimes been supposed, that Plutarch had seen the corona, he must have had this experience in 71 or 83. No one in or near Rome would have seen it in 75. I doubt that these words apply to the corona at all, however, for the subsequent *οὐκ ἐῶσα βαθεῖαν γενέσθαι τὴν σκιὰν καὶ ἄκρατον* would be a remarkably tame way of describing that spectacle. If the passage refers to any observed phenomenon, it is more likely to have reference to an annular eclipse.

may then conclude that the dramatic date of the dialogue is later than A.D. 75, but how much later it is remains uncertain despite Lucius' reference to the eclipse as "recent." The word which he uses, ἔναγχος, like the English "recent," has a meaning relative to its context, and in the case of anything so unusual as a total solar eclipse might refer to an event that had taken place at any time within a decade or more; it seems in this passage not to be used of the immediate past, for Lucius expressly reckons with the possibility that his audience may not recall "the recent conjunction" and may have to fall back upon literary evidence for the impression made by a total solar eclipse.[a] The attempts to find a historical reference in 945 B which would help to fix the date of the dialogue are quite perverse[b]; and we are restricted by the evidence at present available to the conclusion that the conversation was meant to have taken place in or about Rome some time—and perhaps quite a long time—after A.D. 75.

So much for the dramatic date. There is no reason

[a] 931 E: εἰ δὲ μή, Θέων ἡμῖν ⟨τὸν⟩ Μίμνερμον ἐπάξει κτλ. Of course, this is primarily a literary device to excuse the introduction of the literary references; but it shows that Plutarch does not expect his readers to remember what a total solar eclipse is like.

[b] Hirzel (*Der Dialog*, ii, p. 182, n. 1) excised Τυφών in 945 B (Τιτυοὶ δὲ καὶ Τυφῶνες ὅ τε Δελφοὺς κατασχὼν καὶ συνταράξας τὸ χρηστήριον ὕβρει καὶ βίᾳ Τυφὼν ἐξ ἐκείνων κτλ.), took ὅ . . . συνταράξας . . . βίᾳ as a reference to Nero, and concluded that Plutarch must have written this after the devastation of Delphi and before the restoration of the oracle. Adler (*Zwei Beiträge*, etc. [see note *a*, p. 10], pp. 5-7) defended the text of the MSS., which he interpreted to mean "demons of the nature of Tityus and Typho and among these especially the Typhon who, etc.," and followed Pomtow (*Rhein. Mus.* li [1896], pp. 377 ff.), who showed that the extinction of the

at all for Hirzel's assertion [a] that this and the date of composition coincide. Certain striking similarities between the *De Facie* and the *De Defectu Oraculorum* have often been observed, but from these can be drawn equally cogent—and equally hypothetical—arguments for the priority of either to the other [b];

Delphic oracle during the time from Nero to Hadrian was pure invention and who took Τυφών in *De Facie*, 945 B, as a reference to the conflagration in 83 B.C. Adler then, assuming that after the ceremonious restoration of the temple in A.D. 84 Plutarch would not remind his readers of its devastation, concluded that the dialogue must have been written before A.D. 84. This argument was criticized by K. Mras (*Zeitschrift für die österreichischen Gymnasien*, lxv [1914], p. 187), who in turn deleted Τυφῶνες from the text and read Τιτυοὶ δὲ καὶ ὁ Τυφὼν ὁ Δελφούς . . . βίᾳ κτλ. This violent alteration is even less justifiable than Hirzel's excision of Τυφών, with which it shares the fault of producing the hiatus βίᾳ ἐξ; but the text of the MSS. is impossible despite Adler, for (*a*) one does not say in any language "such creatures as Tityus and Typho and in particular Typho . . .," (*b*) nowhere else is Typho himself said to have done the deed here ascribed to him, and (*c*) a reference to the conflagration is at least as improbable as the supposed reference to Nero. Kaltwasser's change of Τυφών to Πύθων, on the other hand, is practically certain. Confusion of π and τ and of θ and φ is easy and common, and πύθων coming after τυφῶνες would very easily be assimilated to it. Moreover, in *De Defectu Oraculorum*, 421 C, τὰ περὶ Πύθωνα are included among δαιμόνων πάθη along with τὰ Τυφωνικά and τὰ Τιτανικά. In 414 A-B the oracle at Delphi is said to have been long deserted in what is represented as "ancient times"; and, if it is denied that the beast (which is not here named but is certainly Python!) was the cause, that is done in order to ascribe the cause to δαίμονες. Finally, Πύθων and Τιτυός are named together by Plutarch in *Pelopidas*, 16 (286 C) as they are by Strabo (ix. 3. 12 [cc. 422-423]) and Apollodorus (*Bibliotheca*, i. 4. 1. 3-5 [22-23]).

[a] *Der Dialog*, ii, p. 184, n. 1.

[b] M. Adler (*Diss. Phil. Vind.* x, pp. 115-116) contends that in the *De Defectu* Plutarch excerpts the *De Facie*; but see Raingeard, p. xxviii of his edition of *De Facie*.

and, since in any case the date of the *De Defectu* is uncertain,[a] the relative chronology of the two if established would not determine the date of the *De Facie*.

4. The structure of the *De Facie* is complicated. The whole of the work is narrated by Lamprias who speaks in the first person and quotes those who took part in the conversation, including himself, some few times in indirect discourse (*e.g.* 933 F) but for the most part directly. The last part of his narration (chaps. 26-30 [940 F—945 D] consists entirely of Sulla's myth given in Sulla's own words; this myth, Sulla himself says, is a story told to him by an unnamed stranger, whom he quotes first indirectly and then (942 D ff.) directly to the end. The second or eschatological part of the myth the stranger had told Sulla that he had himself heard from "the chamberlains and servitors of Cronus" (*cf.* 945 D). Hearing it from Lamprias now, the reader has this part at fourth hand and the geographical introduction of the stranger at third hand.[b]

From 937 C it appears that Sulla had promised to tell his myth in return for an account of what had been said in an earlier discussion about the nature of the face which appears in the moon. Such a compact may have been expressly made in the beginning of the dialogue which is lost, where Sulla may have come upon the company already engaged in reviewing that earlier discussion (see note *a*, p. 3). So much is no more than conjecture. It is certain, however,

[a] Ziegler, *Plutarchos von Chaironeia*, 76, gives "about 100" as the date; but *cf.* Flacelière, *Plutarque : Sur la Disparition des Oracles*, note 4 and pp. 13-17.

[b] *Cf.* Plato's *Parmenides* and Shorey, *What Plato Said*, p. 287.

that most of what Lamprias narrates from chapter 2 through chapter 23 is a conversation which is itself represented as containing a résumé or report of what was said at an earlier conversation. This the beginning of chapter 24 (937 c) states explicitly: ἡμεῖς μὲν οὖν, ἔφην, ὅσα μὴ διαπέφευγε τὴν μνήμην τῶν ἐκεῖ λεχθέντων ἀπηγγέλκαμεν, and the ἐδόκει λέγεσθαι at the end of chapter 2 (920 F) implies that what Lamprias has hitherto said in that chapter had been used as an argument in the earlier discussion. The leader of that discussion, which is referred to as a διατριβή,[a] was not Lamprias or Lucius, who here recapitulate it,[b] but someone to whom Lamprias, Lucius, and Sulla refer as " our comrade " and who probably is meant to be Plutarch himself.[c] Lamprias and Lucius are, of course, presumed to have been present at that discussion with their " comrade " and Sulla to have been absent from it.[d] Of the others, Apollonides certainly was not present,[e] nor was Theon[f]; Phar-

[a] By Lucius at 929 B: ὁ μὲν οὖν ἑταῖρος ἐν τῇ διατριβῇ τοῦτο . . . ἀποδεικνὺς . . . ηὐδοκίμησεν.

[b] *Cf.* besides 937 C, 920 F, and 929 B, which have already been cited, especially 921 F, 930 A, 932 D, 933 C.

[c] *Cf.* 921 F, 929 B, 929 F, and see note *a* on p. 48 *infra*.

[d] The logic of the situation demands this; but it is also implied by Sulla's question at 929 F.

[e] This is implied by his question in 920 F and confirmed by that in 921 B: ἀλλὰ πῇ τὸν ἔλεγχον αὐτῷ προσῆγες; (in this latter passage Pohlenz [*B.P.W.* xxxii, 1912, p. 649] argued for retention of the MSS. reading, προσῆγε, understanding as subject ὁ ἑταῖρος, who he assumes was mentioned in the lost beginning of the dialogue; but surely this sentence is too far from even such a hypothetical antecedent, and Adler's προσῆγες is an obvious and highly probable correction).

[f] This is certainly implied by his interchange with Lucius in 932 D-E.

naces probably was not [a]; and concerning Aristotle and Menelaus the text as we have it allows no clear inference to be drawn.[b] What these men other than Lamprias and Lucius say in chapters 2-23 is not, then, part of the report of that earlier discussion; but neither is all that Lucius says, for in several places his remarks or arguments are expressly declared to be his own contribution.[c] That earlier discussion cannot, however, be identified with any that Plutarch

[a] This is the most reasonable inference to be drawn from 921 F, where Lucius requests that Pharnaces be given some consideration, and from Pharnaces' comment in 922 F upon the attack of Lamprias. Nevertheless, Pharnaces' words in the latter passage, *ἐμὲ δ' οὖν οὐκ ἐξάξεσθε τήμερον κτλ.*, are open to the interpretation that he had been present at the earlier discussion and had there been drawn out by the Academic gambit.

[b] Lucius's one remark to Menelaus (930 A), *αἰσχύνομαι . . . σοῦ παρόντος κτλ.*, seems to imply that the latter had not been present at the earlier discussion; but this is not decisive, especially in view of the fact that Menelaus makes no reply. Aristotle's silence when Lamprias addresses him in 920 F might be taken to mean that he had heard this before; and . . . *πρὸς Κλέαρχον, ὦ Ἀριστότελες, . . . ἐδόκει λέγεσθαι τὸν ὑμέτερον* could be interpreted as a reminder, although what follows, *ὑμέτερος γὰρ ἀνὴρ κτλ.*, sounds as if this were something new. In 929 B Lucius in a speech addressed especially to Aristotle refers to what "our comrade" said *ἐν τῇ διατριβῇ* and adds that he will not repeat what he learned *παρ' ὑμῶν ἢ μεθ' ὑμῶν*, which might be taken to imply that Aristotle too had attended the *διατριβή* in question, although it might have a more general meaning.

[c] *Cf.* Lamprias's comment, *οὐχ οὕτως δ' ὁ ἑταῖρος ἡμῶν*, in 921 F and his *καλῷ λόγῳ καλὴν ἀναλογίαν προσέθηκας· οὐ γὰρ ἀποστερητέον σε τῶν ἰδίων* (931 D). The latter marks the last sentence of Lucius's preceding speech (*δότε δή μοι γεωμετρικῶς εἰπεῖν κτλ.*) as his own, while Lucius's own subsequent statement (*οὐκοῦν καὶ δεύτερον ἀναλογίᾳ προσχρητέον*) makes the same claim for what follows. In 933 C (*παρίημι δ' ὅσα . . . ἐλέχθη*) and possibly in 929 B (*ἐγὼ δὲ ταῦτα μὲν οὐκ ἐρῶ κτλ.*

may have had with his friends or with any lecture that he may have given ; it is primarily a literary fiction, part of the structure of the dialogue for which it provides a specious motivation.

The recapitulation of this fictitious discussion along with the incidental arguments provoked by it contains all that Plutarch would consider to be "scientific" in the dialogue. At its conclusion Lamprias is ready for Sulla's myth (chap. 24 *init.* [937 C-D]) ; but before Sulla can begin to speak Theon raises the question of the habitability of the moon, contending that, if it is not habitable, there can be no reason for it to exist with the nature or composition that according to Lamprias and Lucius it does have.[a] Lamprias calls Theon's speech a kind of relaxation after the seriousness of the preceding discussion. In fact, however, Theon has raised the metaphysical problem of the final cause ; and to this Lamprias replies at length (chap. 25). He argues first that the moon, constituted as he contends it is, need not, even if uninhabitable, be without a purpose in the universe (938 C-F), and secondly that, even if uninhabitable by corporeal human beings, it may still be inhabited by living beings of an entirely different kind to whom the moon may justly appear to be the only real earth and our earth the slime and dregs of the universe, uninhabitable by creatures that have warmth and breath and motion. Here Sulla checks Lamprias (chap. 26 *init.* [940 F]) lest the latter encroach upon his myth ; and Lamprias was upon the very threshold

[see note *b* *supra*]) Lucius indicates that he is not giving a full account of the earlier discussion.

[a] *Cf.* 937 D : . . . εἰ δυνατὸν ἐκεῖ κατοικεῖν. εἰ γὰρ οὐ δυνατόν, ἄλογον καὶ τὸ γῆν εἶναι τὴν σελήνην· δόξει γὰρ πρὸς οὐδὲν ἀλλὰ μάτην γεγονέναι κτλ.

of it, for the myth, as it turns out, teaches that the moon is inhabited by souls that have left their bodies after death on earth or have not yet been incorporated by birth into terrestrial bodies. So the episode consisting of Theon's speech and Lamprias's reply (chaps. 24-25) is not merely a formal literary device. It is, to be sure, a transition from the scientific part of the dialogue, in which it is argued that the lunar phenomena imply the earth-like constitution of the moon, to the concluding myth in which the purpose of such a moon in the universe is imaginatively portrayed ; but this " transitional episode " raises the philosophical question, without the answer to which the strictly astronomical conclusion could to a Platonist or Aristotelian be no complete or satisfactory explanation, and itself contains the metaphysical answer, of which the myth is, despite all its intrinsic interest, essentially a poetical embellishment. When this " transition " is properly attended to, there can be no question about the integral unity of the whole dialogue or any doubt that the purpose of the whole is to establish and defend the position that the moon is entirely earthy in its constitution and that on this hypothesis alone can the astronomical phenomena and the existence of the moon itself be accounted for.[a]

5. The main part of the dialogue is of extraordinary interest for the history of astronomy, cosmology, geography, and catoptrics ; and this aspect of the work deserves more attention than it has usually received.[b] It is not a technical scientific treatise and

[a] *Cf.* M. Pohlenz, *Gött. Gel. Anz.* clxxx [1918], p. 323.

[b] J. O. Thomson, *History of Ancient Geography* (Cambridge, 1948), pp. 330 f., gives a brief outline of this part of

is not to be judged as if it were meant to be such; but it is all the more significant that in a literary work intended for an educated but non-technical audience towards the end of the first century A.D. Hipparchus and Aristarchus of Samos are familiarly cited and a technical work of the latter is quoted verbatim, the laws of reflection are debated, the doctrine of natural motion to the universal centre is rejected, and stress is laid upon the cosmological importance of the velocity of heavenly bodies.[a]

the work and cites Duhem's and Humboldt's praise of it. A. O. Prickard has some general remarks on the subject in the introductions to his two translations of the dialogue (*Plutarch on the Face which appears on the Orb of the Moon* [Winchester and London, 1911], pp. 9-15, and *Plutarch: Select Essays*, ii [Oxford, 1918], pp. 246-253). So has S. Günther in his outline of the dialogue, *Vergleichende Mond- und Erdkunde* (Braunschweig, 1911), pp. 24-35, nearly half of which, however, is concerned with the myth. Hirzel in his treatment of the dialogue (*Der Dialog* [Leipzig, 1895], ii, pp. 182-189) has little or nothing specific to say of its scientific aspect. The most extensive monograph on the dialogue, Maximilian Adler's *Quibus Ex Fontibus Plutarchus Libellum "De Facie in Orbe Lunae" Hauserit* (*Diss. Phil. Vind.* x [1910], pp. 85-180), is concerned with the scientific passages only in so far as the author thinks that from them he can draw support for his thesis that Posidonius was Plutarch's source for the dialogue. A similar purpose limits the treatment of the work by K. Praechter in his *Hierokles der Stoiker* (Leipzig, 1901), p. 26 and pp. 109-120. *Cf.* also the notes of W. Norlind, *Eranos*, xxv (1927), pp. 265-277.

[a] It is interesting to compare the treatise of Ibn Al-Haitham (965–1039) which was translated from the Arabic by Carl Schoy under the title *Abhandlung des Schaichs Ibn 'Alî Al-Ḥasan Ibn Al-Ḥasan Ibn Al-Ḥaitham: Über die Natur der Spuren ⟨Flecken⟩, die man auf der Oberfläche des Mondes sieht* (Hannover, 1925). Ibn Al-Haitham's explanation of the "face" is that the nature of the moon's substance must differ from place to place, since the variation in illumination can be the result only of a difference in the power to absorb and

Most of the attention given to the dialogue, however, has been attracted by the concluding myth.[a] This consists of two parts. The second and main part is the eschatological myth, which establishes the purpose of the moon in the cosmos by explaining her rôle in the "life-cycle" of souls and which the stranger told Sulla he had from the chamberlains of Cronus (942 D—945 D); the first is the introduction

reflect light, and the spots are places of greater density and less power of absorption (pp. 20 ff. and 29-31). Though Schoy appears to have been unaware of it and Plutarch does not mention it, this explanation is ascribed to οἱ ἀπὸ τῶν μαθηματικῶν in Aëtius, ii. 30. 7 (*Dox. Graeci*, p. 362. 5-13). Ibn Al-Haitham rejects the theory that the spots are shadows cast by prominences on the moon, arguing that such shadows would not always have the same shape and position, as the spots do (pp. 14-17). Like Plutarch, however, he knows and refutes the notion that they are a reflection of the terrestrial ocean or any other terrestrial feature (pp. 1-2, 5-7; *De Facie*, chaps. 3-4): and he also adduces the colour of the moon in eclipse (pp. 31 f.; *De Facie*, 934 B-D). He proves impossible as well (pp. 4-5, cf. p. 2) an explanation unmentioned by Plutarch but recorded by Simplicius (*De Caelo*, p. 457. 25-30) that the spots are the result of vapours rising from below and obscuring the moon's brilliance (*cf.*, however, for something similar, Milton, *Paradise Lost*, v. 415-420, and *De Facie*, 922 B-C). Like Cleomedes (ii. 4. 103 [p. 186. 14-27 Ziegler]), Ibn Al-Haitham seems to hold that the moon as a reflecting convex mirror would have to appear as a single point of light (pp. 7 f. with Schoy's note, p. 8, n. 1).

[a] It was probably the myth as much as the more strictly astronomical part of the dialogue that caused Kepler to make his Latin translation and commentary of the *De Facie*, which he did shortly before his death. This is printed in volume viii of *Joannis Kepleri Opera Omnia*, ed. Dr. Ch. Frisch (Francofurti a. M., 1870). *Cf.* R. Schmertosch, "Keppler zu Plutarchs Schrift 'Vom Gesicht im Monde,'" *Phil.-Hist. Beiträge Curt Wachsmuth zum 60. Geburtstag überreicht* (Leipzig, 1897), pp. 52-55, and R. Pixis, *Kepler als Geograph* (Munich, 1899).

to this myth or "frame-story," in which the stranger explained to Sulla how from the continent on the other side of the Atlantic he came to the Isle of Cronus, one of several that lie westwards of Britain, and thence, after having served thirty years, travelled to Carthage where he met Sulla (941 A—942 C).

This geographical introduction has aroused the wildest speculations. Kepler was convinced that the trans-Atlantic continent was America, and he tried to identify the islands mentioned in the myth [a]; W. Christ in 1898 still could assert that Plutarch's continent is "obviously America" and proves that about A.D. 100 sailors reached the North American coast *via* Iceland, Greenland, and Baffinland [b]; and in 1909 G. Mair argued that the source of this knowledge of America was reports of Carthaginian seafarers who had penetrated into the Gulf of Mexico, that the Isle of Cronus is Scandinavia, and that the northern geography of the myth derives from accounts of the voyages of Pytheas of Massilia.[c] Even

[a] *Cf.* notes 97, 98, 103, and 105 to Kepler's translation (see note *a*, p. 20 *supra*) and note 2 to his *Somnium sive Astronomia Lunaris.* In *Theatrum Orbis Terrarum Abrahami Ortelii* (Antwerp, 1593), p. 5, this passage of Plutarch was used, apparently for the first time, to prove that the ancients knew the American continent.

[b] *Geschichte der griechischen Litteratur*, Dritte Auflage (1898), p. 662, n. 1. W. Schmid and O. Stählin in the sixth edition of this work (Zweiter Teil, Erste Hälfte [1920], p. 498) suppress this note of Christ's but write "aus dem Festland jenseits des atlantischen Ozeans (Amerika ?)."

[c] G. Mair, "Pytheas' Tanais und die Insel des Kronos in Plutarchs Schrift 'Das Gesicht im Monde'" (*Jahresbericht des K.K. Staats-Gymnasiums in Marburg a/D*, 1909). A fair example of Mair's argument is his identification (p. 18) of the κόλπος mentioned in 941 B with the Christiana-Fjord, although according to Plutarch it is in the trans-Atlantic

before Mair had published his fantastic theory Ebner had conclusively demonstrated that Plutarch could not have referred to any real crossing of the Atlantic or any rumours of such a crossing, that by using the name Ogygia at the beginning (941 A-B) he had clearly indicated the purely mythical intention of his geography, and that this geographical setting is simply an imitation of Plato's Atlantis in the spirit of Hecataeus' story of the Hyperboreans, Theopompus' Meropis, and the Sacred Records of Euhemerus.[a] The additional geographical particulars are the usual " corroborative detail intended to give

continent. Moreover, all of Plutarch's islands lie to the West and North-West of Britain !

[a] E. Ebner, *Geographische Hinweise und Anklänge in Plutarchs Schrift, de facie in orbe lunae* (Munich, 1906). A. von Humboldt had concluded long before that the geographical frame is entirely mythical (*Kritische Untersuchungen über die historische Entwicklung der geographischen Kenntnisse von der Neuen Welt* [Berlin, 1836], pp. 174-185). H. von Arnim (" Plutarch über Dämonen und Mystik," pp. 37-47 [*Verhand. K. Akad. van Wetenschappen te Amsterdam*, Afd. Letterk., 1921]) contended that Plutarch's source for chapter 26 was a " fantastic travel-romance " that had nothing to do with philosophy or moon-demonology, but in which the demons of Cronus served the purpose of prophesying to the hero about his future. W. Hamilton (*Class. Quart.* xxviii [1934], pp. 24 ff., *cf.* p. 24, n. 1),while citing as parallels to the geographical myth Hecataeus, Euhemerus, Theopompus, and the *Abaris* of Heraclides Ponticus (*cf.* also Hirzel, *Der Dialog*, ii, p. 187, n. 4), maintains that Plutarch wrote the whole of his myth in direct imitation of Plato's story of Atlantis. Rohde (*Der griechische Roman*, 204-276=3rd edition [Leipzig, 1914], pp. 219-296) places Plutarch's geographical myth in its proper environment with the romances of Theopompus, Hecataeus, Euhemerus, Iambulus, Antonius Diogenes, and Marcellus. *Cf.* also H. Martin, *Études sur le Timée de Platon* (Paris, 1841), i, pp. 290-304, and J. O. Thomson, *op. cit.* (note *b*, p. 18), pp. 237-238.

artistic verisimilitude to an otherwise bald and unconvincing narrative." The theme of the sleeping Cronus may have been suggested to Plutarch by Demetrius of Tarsus, who in the *De Defectu Oraculorum* (419 E—420 A) is made to say that on an island near Britain Cronus is kept prisoner by the bonds of sleep and is guarded by Briareus and attended by Spirits who are his servitors. This Demetrius appears to have been an historical person who did travel to Britain, whence in the dialogue he is said to have recently returned ; and he may have told Plutarch some Celtic legend or superstition which the latter hellenized and wove into the fabric of his myth.[a]

The discussion of the second part of the myth, the demonology and eschatology, has also been concerned mainly with the problem of Plutarch's sources. Heinze attempted to prove that this myth had been put together out of material drawn from Xenocrates and from Posidonius and that in the resulting combination the parts that belong to those two authors

[a] For Demetrius *cf.* R. Flacelière, *Plutarque : Sur la Disparition des Oracles* (Paris, 1947), pp. 26-28, and K. Ziegler, *Plutarchos von Chaironeia* (Stuttgart, 1949), 36. If Demetrius did hear a Celtic tale of a god or hero asleep on some western island, it would have been easy for him or Plutarch to identify the subject with Cronus (*cf.* Hesiod, *Works and Days*, 169, and Pindar, *Olympian*, ii. 77 [70] ff. ; see also note *a* on p. 182 and note *a* on 942 A *infra*). Pohlenz's notion (*R.E.* xi. 2013) that Posidonius, who was " familiar with the northern world," was the intermediary of this " Kyffhäusermotiv " has nothing to support it. Posidonius was the source of the Cronus-motif as well as of the whole geographical part of the myth according to M. Adler, *op. cit.* (note *b*, p. 18), pp. 169-170, who has no trouble in showing that Schmertosch adduced no real reason for designating Xenocrates as Plutarch's source for this section ; but Hamilton (*loc. cit.* [note *a*, p. 22]) has proved that Posidonius could not have been the source either.

are distinguishable.[a] Adler vigorously attacked this thesis and argued that Posidonius was Plutarch's source for the whole myth and for whatever there is in it that may have come ultimately from Xenocrates[b]; but R. M. Jones[c] proved conclusively that neither Heinze's conclusions nor Adler's will bear scrutiny, that Posidonius could not have been the source, and that, while Plutarch combined various eschatological notions which were current and some of which were probably held in common by different philosophers, his myth is in the main an interpretation of Plato's *Timaeus*. Later, against Karl Reinhardt's attempt to trace the myth back to a hypothetical "solar eschatology" of Posidonius, Jones re-established the Platonic character of Plutarch's eschatology, psychology, and demonology here and the impossibility of taking Posidonius for the source.[d]

[a] Richard Heinze, *Xenokrates* (Leipzig, 1892), pp. 123 ff. M. Pohlenz, *Vom Zorne Gottes* (Göttingen, 1909), p. 133, n. 1, approved Heinze's conclusion in general but differed with him in some particulars.

[b] Maximilian Adler, *op. cit.* (note *b*, p. 18), pp. 166 ff. Adler's dissertation was reviewed by Pohlenz in *B.P.W.* xxxii (1912), 648-654, and his thesis concerning the source of the myth criticized, *ibid.* 653. P. Capelle (*De luna stellis lacteo orbe animarum sedibus* [Halle, 1917], pp. 14-15) held that chapter 28 came from Posidonius's account of the state of souls after death and chapters 29 and 30 from his supposed commentary on the *Timaeus*.

[c] *The Platonism of Plutarch* (Chicago Dissertation, Menasha, Wisconsin, 1916), pp. 48-56 and 58-60.

[d] K. Reinhardt, *Kosmos und Sympathie* (Munich, 1926), pp. 313 ff. (*cf.* also F. Cumont, "La Théologie solaire du paganisme romain," *Mém. de l'Acad. des Inscriptions*, xii [1909]); R. M. Jones, "Posidonius and Solar Eschatology," *Class. Phil.* xxvii (1932), pp. 113-135, especially pp. 116-131. P. Boyancé, *Études sur le Songe de Scipion* (Bordeaux and Paris, 1936), pp. 78-104, follows Jones in refuting Cumont and Reinhardt.

Hamilton later contended even more positively that Plutarch took the *Timaeus* as the model for the whole of his myth in the *De Facie* and that, since the *De Animae Procreatione in Timaeo* shows that he regarded the *Timaeus* seriously, he must have intended the corresponding portion of his myth in the *De Facie* to contain an equally serious exposition of his own beliefs concerning the nature and fate of the soul.[a] Soury in his extensive study of the myth, while emphasizing the possible influence of the mysteries, agrees in general with Hamilton that it is preponderantly Platonic.[b]

Anyone who without a preconceived thesis to defend reads the *De Facie* will recognize, I believe, that Plato was Plutarch's inspiration throughout the dialogue but that Plutarch is himself the true author of the whole work and that, while there is in it a distillation of his wide and varied scientific and philosophical reading, he cannot possibly have composed it by copying out any source or combination of sources. I have tried in the exegetical notes to indicate the " parallels " which will help the reader to understand the dialogue itself by seeing its relation

[a] W. Hamilton, *Class. Quart.* xxviii (1934), pp. 24-30. Hamilton expressly opposes the theory of von Arnim, who, in his " Plutarch über Dämonen und Mystik " (see note *a*, p. 22), pp. 24-65, argues that Plutarch took the geographical myth and the eschatological myth from two different sources and the latter from an eclectic Platonist later than Antiochus. As to Hamilton's notion of the seriousness with which Plutarch intended the myth, Ziegler is surely right in saying (*Plutarchos von Chaironeia*, 217) that Sulla's final sentence, taken together with Lamprias's remark in 920 B-C, shows that Plutarch had no intention of insisting upon the literal truth of the myth ; in this attitude also he follows Plato : see note *a* on p. 223 *infra*.

[b] G. Soury, *Rev. Ét. Gr.* liii (1940), pp. 51-58, and *La Démonologie de Plutarque* (Paris, 1942), pp. 73-82 and 177-210.

to the rest of ancient scientific and philosophical thought. Among these "parallels" some of the most striking are drawn from later writers, especially Neo-Platonists; these I have mentioned not in order to insinuate that they show Plutarch's direct influence upon those later writers, although many of them certainly were acquainted with him, but because they illuminate the meaning of the *De Facie* and at the same time indicate what may have been contained in some of the philosophical writings known to Plutarch and long since lost to us, and may help to cast some flicker of light upon that obscure and controversial problem, the prehistory of Neo-Platonism.

6. The *De Facie*, which is No. 73 in the so-called Catalogue of Lamprias and No. 71 in the Planudean order, is apparently preserved in only two MSS. of the Bibliothèque Nationale, Grec 1672 (saec. XIV) and 1675 (saec. XV), conventionally called Parisinus E and Parisinus B respectively.[a] These have hitherto been supposed to be independent copies of a single archetype[b]; but recently G. R. Manton has put

[a] On the MSS. of Plutarch generally *cf.* the references cited by M. Pohlenz, *Plutarchi Moralia*, i (Teubner, 1925), Praefatio, p. vi, n. 1, and pp. xxvi and xxviii f. on B and E respectively.

[b] Wyttenbach (*Plutarchi Moralia* [Oxford, 1795], p. xliv) says of B "ut videtur, ex E, aut ejusdem exempli codice, ita descriptus ut antiquiores melioresque simul adhiberentur; unde quaedam lacunae uberius etiam expletae, et plura menda sanata." M. Treu, *Zur Geschichte der Überlieferung von Plutarchs Moralia*, ii (Ohlau, 1881), pp. 5-7, argued that B derives from the same source as E, which B must have used later; and his conclusion was generally accepted by later editors. Raingeard's more complicated stemma (p. xiv of his edition of the *De Facie*) is, in any case, entirely unjustified.

forward strong arguments for thinking that B is a descendant of E through an intermediate manuscript, " a copy of E, which was worked over by a scholar who filled in lacunae and inserted conjectures of his own." [a]

I have collated both manuscripts from photostats which were generously put at my disposal by Dr. William C. Helmbold ; and I have recorded under the usual symbols the variant readings of each of them, for I soon discovered that not only is Bernardakis' report of the MSS. untrustworthy, but that the same must be said of Raingeard's in his recent edition of the dialogue, and that even Treu's collation (see note *b*, p. 26) is not free of errors. I have not recorded mere omissions or variations of accent or breathing, however, unless the sense is affected by them ; and I have regularized crasis and elision without regard to the manuscripts or report of them,

[a] " The Manuscript Tradition of Plutarch *Moralia* 70-7," *Class. Quart.* xliii (1949), pp. 97-104. Among the passages discussed by Manton where B has readings other than those of E are none from the *De Facie*, for the text of which Manton (*op. cit.* p. 99, n. 1) depended upon Treu's collation supplemented by Bernardakis' list in vol. i of his edition, pp. 1 ff. ; but I have found no variant reading of B in this essay that would surely gainsay Manton's hypothesis. Those which might suggest that B is not descended from E are the following: 927 F: τὸν -B for E's correct τὰ before ἐμβριθῆ ; 929 B: ἔχων δὲ -B, ἔχων δὲ τοῦτο -E for the correct ἑκὼν δὲ ; 932 D : πεποιημένων -B for E's correct πεπεισμένων ; 937 F : ἐπιφερομένη -B, φερομένη -E for the probable original ἀντιφερομένη ; 938 D : ἀναγινώσκων -B for E's correct ἀναγινώσκοντος ; 943 D : καταγινομένας -B for E's correct καταδυομένας. Manton's conclusion has been rejected by K. Hubert (*Rhein. Mus.* xciii [1950], pp. 330-336), but Hubert's defence of the independence of B and E has been counterattacked by Einarson and De Lacy (*Class. Phil.* xlvi [1951], pp. 103 and 106, with notes 36 and 56).

for they show no consistency in this matter.[a] In conformity with the usage of Professor Babbitt and regardless of the manuscripts, I have printed the forms γίγνεσθαι, γιγνώσκειν, and οὐδείς, though the manuscripts usually have γίνεσθαι, γινώσκειν, and οὐθείς; but I have adopted the form δυεῖν throughout. I have tried to the best of my ability to assign emendations to those who first proposed them; but for some which appear without ascription in all modern editions, and the author of which I have been unable to discover, I have had to be content with the unsatisfactory note, "editors." For the suggestions said to be written in three different hands on the margins of the copy of the Aldine edition now in the Bibliothèque Nationale (Rés. J. 94), I have had to rely upon the report

[a] For example, in 931 D they have τὰ αὐτὰ πάσχειν ὑπὸ τοῦ αὐτοῦ . . . ταὐτὰ (B, ταυτὰ -E) ποιεῖν ταὐτὸν . . . and occasionally οἶδ' ὅπως and ἀλλ' ὅπως, although they do not ordinarily elide the α of οἶδα and ἀλλά. Almost invariably both E and B have μὴ δὲ instead of μηδὲ or μηδ'. On these matters *cf.* T. Doehner, *Quaestionum Plutarch. Particula Altera* and *Tertia* (Meissen, 1858 and 1862), especially iii, p. 51, and ii, p. 35, n.**; and on the question of hiatus *cf.* Helmbold, *Class. Phil.* xxxiii (1938), pp. 244-245, and xlv (1949), pp. 64 f. with his references, and for a much stricter view Ziegler, *Plutarchos von Chaironeia*, 295-298. To "emend" for the sole purpose of eliminating hiatus is to take unwarranted liberty with the text; but, on the other hand, to introduce hiatus by emendation is certainly inadmissible. It should be observed, however, that in the *De Facie*, besides the exceptions to avoidance of hiatus listed by Ziegler (*op. cit.* 296-297), final αι, οι, ει, and ου before an initial vowel may always be possible (*cf.* for ου *e.g.* τοῦ ἰδίου ἀέρος in 944 A), ἄνω and κάτω are permissible before any word beginning with a vowel (*cf.* ἄνω ἔχειν and κάτω ἄνωθεν in 924 C which guarantee ἄνω ἐστίν in 926 A), and other cases of hiatus which cannot reasonably be eliminated occasionally occur (*e.g.* χείλη εἰκόνας [921 C], τουτὶ εἴπω [935 D]).

of Raingeard in the *apparatus criticus* of his edition (*cf.* pp. xvi f. of his Introduction)[a]; all of these I indicate without differentiation by the formula, " Anon., Aldine, R.J. 94." Upon Raingeard's report and those of Reiske, Wyttenbach, Hutten, and Bernardakis I have had to rely for the variant readings of the Aldine edition and of the edition of Xylander; but the edition of Froben (Basiliensis, 1542), as well as those of Stephanus (1624), Reiske, Wyttenbach, Hutten, Dübner, Bernardakis, and Raingeard, and the translations of Xylander, Amyot, Kepler, Kaltwasser, the two translations of Prickard,[b] and that of portions of the essay by Heath,[c] I have consulted and compared throughout.

Those emendations which, so far as I know, are original with me are indicated by the initials H. C. Besides the editions, translations, and articles already mentioned in this Introduction, the chief aids to my study of the text have been the following:

[a] P. Raingeard, *Le* ΠΕΡΙ ΤΟΥ ΠΡΟΣΩΠΟΥ *de Plutarque, texte critique avec traduction et commentaire* (Paris, 1935). Raingeard's text is fantastically " conservative," reproducing E for the most part even where E gives impossible Greek; and yet his report of the manuscripts is frequently erroneous either explicitly or by implication. The translation is worse even than the text; and the commentary, especially where it touches upon philosophical and scientific questions, is more often wrong than right, almost everywhere inadequate, and frequently absurd.

[b] See note *b*, p. 18. Prickard's translation of 1911 was reviewed by W. R. Paton, *Class. Rev.* xxvi (1912), p. 269, and by L. C. Purser, *Hermathena*, xvi (1911), pp. 309-324, whose review is rather a series of notes and suggestions for almost two score passages in the essay.

[c] Sir Thomas L. Heath, *Greek Astronomy* (London, 1932), pp. 166-180.

Adler, Maximilian: *Diss. Phil. Vind.* x (1910), pp. 87 ff. (*cf.* note *b*, p. 18).
Wiener Studien, xxxi (1909), pp. 305-309.
"Zwei Beiträge zum plutarchischen Dialog 'De Facie in Orbe Lunae,'" *Jahresbericht des K.K. Staatsgymnasiums in Nikolsburg*, 1909–1910 (Nikolsburg, 1910).
Wiener Studien, xlii (1920–1921), pp. 163-164.
Festschrift Moriz Winternitz (Leipzig, 1933), pp. 298-302.

Apelt, Otto: "Zu Plutarch und Plato," *Jahresbericht Gymnasium Carolo-Alexandrinum zu Jena*, 1904–1905 (Jena, 1905).
"Kritische Bemerkungen," *Jahresbericht . . . Jena*, 1905–1906 (Jena, 1906).

Chatzidakis, G. N.: *Athena*, xiii (1901), pp. 462-714.

Cobet, C. G.: *Novae Lectiones* (Leiden, 1858).
Variae Lectiones (Leiden, 1878).
Collectanea Critica (Leiden, 1878).

Emperius, A.: *Emperii Opuscula Philologica et Historica* . . . ed. F. G. Schneidewin (Göttingen, 1847), pp. 287-295.

Hartman, J. J.: *De Plutarcho Scriptore et Philosopho* (Leiden, 1916), pp. 557-563.

Herwerden, H. van: *Lectiones Rheno-Traiectinae* (Traj. ad Rhen., 1882).
Mnemosyne, xxii (1894), pp. 330-337, and xxxvii (1909), pp. 202-223.

Kronenberg, A. J.: *Mnemosyne*, lii (1924), pp. 60-112, and Ser. iii, x (1941), pp. 33-47.

Kunze, R.: *Rhein. Mus.* lxiv (1909), pp. 635-636.

Madvig, J. N.: *Adversaria Critica*, I (Hauniae, 1871), pp. 664-666.

Mras, K. : *Zeitschrift für die österreich. Gymnasien*, lxv (1914), pp. 187-188.
Naber, S. A. : *Mnemosyne*, xxviii (1900), pp. 329-364.
Papabasileios, G. A. : *Athena*, x (1898), pp. 167-242.
Pohlenz, Max : *Berliner Philologische Wochenschrift*, xxxii (1912), pp. 648-654.
Götting. Gelehrte Anzeig. clxxx (1918), pp. 321-343.
Sandbach, F. H. : *Proc. of the Cambridge Philological Soc.*, 1943.

Harold Cherniss

Addendum

Since this Bibliography was compiled in February 1953 some publications dealing with the *De Facie* have come to my attention which require a brief notice.

Konrat Ziegler in *Plutarch über Gott und Vorsehung, Dämonen und Weissagung* (Zürich, Artemis-Verlag, 1952) has written a brief summary of the essay (pp. 42-45) and has translated the myth (940 F—945 D) into German (pp. 268-278) with the addition of a few explanatory notes. He makes one noteworthy alteration in the text at 941 A-B : adopting τὸν δὲ Βριάρεων ἔχοντα φρουρόν, after which he puts a full stop, he removes the following words, τῶν τε νήσων . . . παρακάτω κεῖσθαι (?), from their position in the mss. and places them after κύκλῳ θάλαττα in 941 B three lines below.

The question of the mss., which is touched upon in the Introduction § 6 *supra*, has been discussed, though without specific reference to the *De Facie*, by R.

Flacelière in his edition and translation of the *Amatorius* (*Plutarque : Dialogue sur l'amour* [Paris, " Les Belles Lettres," 1952], pp. 35-37) and in an article, " La Tradition manuscrite des traités 70-77 de Plutarque," *Rev. Études Grecques*, lxv (1952), pp. 351-362. By a different route he reaches the same conclusion as did G. R. Manton, namely that B is derived from E, probably through an intermediate manuscript now lost.[a] In *Gnomon*, xxv (1953), pp. 556-557 K. Hubert replied to Flacelière's arguments and again sought to establish the independence of B with respect to E.

Flacelière in his article entitled " Plutarque et les éclipses de la lune " (*Rev. Études Anciennes*, liii [1951], pp. 203-221) is primarily concerned with the interpretation of *De Genio Socratis*, 591 c, but in connection with this he discusses *De Facie*, 933 D-E and 942 D-E and argues that in the former of these two passages Plutarch depends upon the calculations of Hipparchus (*cf.* my note in *Class. Phil.* xlvi [1951], p. 145 referred to in note *e* on 933 E *infra*).

G. Zuntz in *Rhein. Mus.* xcvi (1953), pp. 233-234 has proposed several emendations in the text of the essay :

940 E : He is right in assuming that Bernardakis' ὑμεῖς is a misprint for ἡμεῖς of the MSS., but ὥσπερ which he condemns and emends is, of course, correct ; he apparently misunderstood the construction, ὥσπερ ἡμεῖς (*scil.* χρώμεθα) ἀέρι.

942 F : After τίς δ' οὗτός ἐστιν ; he would add ⟨ἔφην· ὁ δ'·⟩, thus producing the same effect as did Reiske's punctuation. *Cf.* on this sentence my note in *Class. Phil.* xlvi (1951), pp. 150-151.

[a] *Cf.* Irigoin, *Rev. de Philologie*, xxviii (1954), pp. 117-119.

943 D: He would write τὸ ἄλογον καὶ [τὸ] παθητικόν on the strength of *De Def. Orac.* 417 B (p. 75. 23 [Sieveking]). This would be possible but is unnecessary, since καὶ can here be taken as " explicative."

944 C: He suggests Φερσεφόνης οὖδος ἀντιχθόνιος or Φερσεφόνης οὖδος ἀντίχθονος, apparently unaware of von Arnim's far more probable emendation (see notes *d* and *e* on p. 221 *infra*). His further supplement, τὰ δὲ ⟨πρὸς τὰ⟩ ἐνταῦθα, is quite unnecessary.

944 E: To ἔρωτι τῆς περὶ τὸν ἥλιον εἰκόνος he would add ⟨τοῦ ἑνὸς⟩ or ⟨τοῦ νοητοῦ⟩ or ⟨τἀγαθοῦ⟩ on the ground that the phrase as it stands is unintelligible. The following words, δι' ἧς ἐπιλάμπει κτλ., themselves explain what Plutarch means (see note *g* on 944 E *infra*), and there is no excuse for any supplement at all.

945 B: He rightly defends Kaltwasser's alteration of Τυφὼν to Πύθων (see Introduction, p. 12, note *b supra*).

H. C.

November 1954

To my great regret I have been unable to take account of Professor M. Pohlenz's edition of this essay in *Plutarchi Moralia*, vol. v, Fasc. 3 (Leipzig, Teubner, 1955), since it became available only after this volume had already been paged and corrected for printing.

H. C.

February 1956

(920) ΠΕΡΙ ΤΟΥ ΕΜΦΑΙΝΟΜΕΝΟΥ ΠΡΟΣΩΠΟΥ ΤΩΙ ΚΥΚΛΩΙ ΤΗΣ ΣΕΛΗΝΗΣ[1]

B 1. . . . ὁ Σύλλας ταῦτ᾽ εἶπε. “τῷ γὰρ ἐμῷ[2] μύθῳ προσήκει κἀκεῖθέν ἐστι· ἀλλ᾽ εἰ δεῖ τι πρὸς τὰς ἀνὰ χεῖρα ταύτας καὶ διὰ στόματος πᾶσι δόξας περὶ τοῦ προσώπου τῆς σελήνης προσανακρούσασθαι πρῶτον ἡδέως ἄν μοι δοκῶ πυθέσθαι.” “τί δ᾽ οὐκ ἐμέλλομεν” εἶπον “ὑπὸ τῆς ἐν ταύταις ἀπορίας ἐπ᾽ ἐκείνας[3] ἀπωσθέντες; ὡς γὰρ οἱ ἐν νοσήμασι χρονίοις πρὸς τὰ κοινὰ βοηθήματα καὶ τὰς συνήθεις διαίτας ἀπειπόντες ἐπὶ καθαρμοὺς καὶ περίαπτα καὶ ὀνείρους τρέπονται, οὕτως ἀναγκαῖον ἐν δυσθεωρήτοις καὶ ἀπόροις σκέψεσιν, ὅταν οἱ
C κοινοὶ καὶ ἔνδοξοι καὶ συνήθεις λόγοι μὴ πείθωσι, πειρᾶσθαι τῶν ἀτοπωτέρων καὶ μὴ καταφρονεῖν ἀλλ᾽ ἐπᾴδειν ἀτεχνῶς ἑαυτοῖς τὰ τῶν παλαιῶν καὶ διὰ πάντων τἀληθὲς ἐξελέγχειν.

[1] E, B ; περὶ τοῦ ἐν τῇ σελήνῃ φαινομένου προσώπου—“Catalogue of Lamprias” (No. 73) : περὶ τοῦ ἐμφαινομένου κύκλου τῆς σελήνης -Folio 1 (verso) of Marc. 250 (X).

[2] Raingeard ; Ὀαννοσυλλας ταῦτα εἶπε κτλ. -E ; Ὁ μὲν οὖν σύλλας ταῦτα εἶπε κτλ. -B ; Ὁ μὲν οὖν Σύλλας, “ταῦτα,” εἶπε, “τῷ γ᾽ ἐμῷ κτλ. -Wyttenbach, who for γὰρ ἐμῷ also suggested παρ᾽ ἐμοί.

[3] Wyttenbach (ἐκείνας -Anon., Aldine, R.J. 94) : τούτοις . . . ἐκείνους -E, B.

CONCERNING THE FACE WHICH APPEARS IN THE ORB OF THE MOON

1. . . . These were Sulla's words.[a] " For it concerns my story and that is its source ; but I think that I should first like to learn whether there is any need to put back for a fresh start [b] to those opinions concerning the face of the moon which are current and on the lips of everyone." " What else would you expect us to have done," I said,[c] " since it was the difficulty in these opinions that drove us from our course upon those others ? As people with chronic diseases when they have despaired of ordinary remedies and customary regimens turn to expiations and amulets and dreams, just so in obscure and perplexing speculations, when the ordinary and reputable and customary accounts are not persuasive, it is necessary to try those that are more out of the way and not scorn them but literally to chant over ourselves [d] the charms of the ancients and use every means to bring the truth to test.

[a] Concerning the mutilated beginning of the dialogue see Introduction § 1.

[b] For the metaphor *cf. An Seni Respublica Gerenda Sit*, 787 E, and Plato, *Philebus*, 13 D ; the meaning is guaranteed by ἀπωσθέντες (" driven from our course ") *infra*. *Cf.* the nautical metaphor with which Sulla interrupts Lamprias at 940 F *infra* (τὸν μῦθον . . . ἐξοκείλας).

[c] The speaker and narrator of the dialogue is Lamprias, the brother of Plutarch ; *cf.* 937 D, 940 F, 945 D, *infra*.

[d] *Cf.* Plato, *Phaedo*, 77 E and 114 D, *Republic*, 608 A.

(920) 2. Ὁρᾷς γὰρ εὐθὺς ὡς ἄτοπος ὁ λέγων τὸ φαινόμενον εἶδος ἐν τῇ σελήνῃ πάθος εἶναι τῆς ὄψεως, ὑπεικούσης τῇ λαμπρότητι δι' ἀσθένειαν, ὃ ⟨μαραυγίαν⟩[1] καλοῦμεν,[2] οὐ συνορῶν ὅτι πρὸς τὸν ἥλιον ἔδει τοῦτο γίγνεσθαι μᾶλλον ὀξὺν ἀπαντῶντα καὶ πλήκτην (ὥς που καὶ Ἐμπεδοκλῆς τὴν ἑκατέρων ἀποδίδωσιν οὐκ ἀηδῶς διαφορὰν

ἥλιος ὀξυβελὴς ἠ δ' αὖ ἱλάειρα σελήνη,[3]

τὸ ἐπαγωγὸν αὐτῆς καὶ ἱλαρὸν καὶ ἄλυπον οὕτως[4] προσαγορεύσας) ἔπειτ' ⟨οὐ⟩[5] λόγον ἀποδιδοὺς καθ' D ὃν αἱ ἀμυδραὶ καὶ ἀσθενεῖς ὄψεις οὐδεμίαν διαφορὰν ἐν τῇ σελήνῃ μορφῆς ἐνορῶσιν ἀλλὰ λεῖος αὐταῖς ἀντιλάμπει καὶ περίπλεως αὐτῆς ὁ κύκλος οἱ δ' ὀξὺ καὶ σφοδρὸν ὁρῶντες ἐξακριβοῦσι μᾶλλον καὶ διαστέλλουσιν ἐκτυπούμενα τὰ εἴδη τοῦ προσώπου καὶ τῆς διαφορᾶς ἅπτονται σαφέστερον· ἔδει γάρ, οἶμαι, τοὐναντίον, εἴπερ ἡττωμένου πά⟨θος⟩[6] ὄμματος ἐποίει τὴν φαντασίαν, ὅπου τὸ πάσχον ἀσθενέστερον, ⟨σαφέστερον⟩[7] εἶναι τὸ φαινόμενον. ἡ δ' ἀνωμαλία καὶ παντάπασιν ἐλέγχει τὸν λόγον· οὐ γάρ ἐστι[8] συνεχοῦς σκιᾶς καὶ συγκεχυμένης

[1] H. C. (*cf.* Stobaeus, *Ecl.* iii. 1. 196); vac. 8-E, 9-B; μαραυγεῖν -Wyttenbach; μαρμαρυγὰς -Raingeard (*cf.* Plato, *Timaeus*, 68 A; Chariton, E, 3. 9).

[2] So punctuated in Basiliensis; E and B have mark of interrogation.

[3] Xylander (ἱλάειρα σελήνη -Hesychius); ἥλιος ὀξυμελὴς ἡ δὲ λάιρα σελήνη -E, B; . . . ἠδ' ἱλάειρα σελήνη -Dindorf (and Emperius) followed by Diels-Kranz; . . . ἠδ' ⟨ἤδ'⟩ ἱλάειρα σελήνη -Purser. [4] E; οὕτω -B.

[5] Bases (1897); ἔπειτα λόγον -E, B; ἔπειτα λόγον ⟨οὐκ⟩ -Emperius (1847).

[6] Wyttenbach; πα vac. 4-E, 5-B.

2. Well, to begin with, you see that it is absurd to call the figure seen in the moon an affection of vision in its feebleness giving way to brilliance, a condition which we call ⟨bedazzlement⟩. Anyone who asserts this [a] does not observe that this phenomenon should rather have occurred in relation to the sun, since the sun lights upon us keen and violent (as Empedocles [b] too somewhere not infelicitously renders the difference of the two :

> The sun keen-shafted and the gentle moon,

referring in this way to her allurement and cheerfulness and harmlessness), and moreover does ⟨not⟩ explain why dull and weak eyes discern no distinction of shape in the moon but her orb for them has an even and full light, whereas those of keen and robust vision make out more precisely and distinctly the pattern of facial features and more clearly perceive the variations. In fact the contrary, I think, should have been the case if the image resulted from an affection of the eye when it is overpowered : the weaker the subject affected, ⟨the clearer⟩ should be the appearance of the image. The unevenness also entirely refutes the hypothesis, for the shadow that one sees is not continuous and confused but is not

[a] If Plutarch has a definite person in mind, I have not been able to identify him. Adler (*Diss. Phil. Vind.* x, p. 127) thinks that ὁ λέγων refers to a physicist whose name Plutarch himself probably did not know, and Raingeard that it refers to " esprits cultivés " in general.

[b] Frag. 40 (i, p. 329. 11 [Diels-Kranz]).

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[7] Wyttenbach (who, however, also inserted ἐστιν before σαφέστερον), implied in the versions of Amyot and Kepler ; ἀσθενέστερον εἶναι -E, B.

[8] Wyttenbach ; ἐπὶ -E, B.

(920) ὄψις, ἀλλ' οὐ φαύλως ὑπογράφων ὁ Ἀγησιάναξ[1] εἴρηκε

E πᾶσα μὲν ἥδε πέριξ πυρὶ λάμπεται, ἐν δ' ἄρα μέσσῃ[2]
γλαυκότερον κυάνοιο φαείνεται ἠύτε κούρης
ὄμμα καὶ ὑγρὰ μέτωπα· τὰ δὲ ῥέθει[3] ἄντα ἔοικεν·

ὄντως γὰρ ὑποδύεται περιιόντα[4] τοῖς λαμπροῖς τὰ σκιερὰ καὶ πιέζει ⟨πιεζόμενα⟩[5] πάλιν ὑπ' αὐτῶν καὶ ἀποκοπτόμενα καὶ ὅλως πέπλεκται δι' ἀλλήλων F ⟨ὥστε⟩[6] γραφικὴν τὴν δια⟨τύπωσιν⟩[7] εἶναι τοῦ σχήματος. ⟨τοῦτο δὲ⟩[8] καὶ πρὸς Κλέαρχον, ὦ Ἀριστότελες, οὐκ ἀπιθάνως ἐδόκει λέγεσθαι τὸν ὑμέτερον· ὑμέτερος γὰρ ἀνήρ,[9] Ἀριστοτέλους[10] τοῦ παλαιοῦ γεγονὼς συνήθης, εἰ καὶ πολλὰ τοῦ Περιπάτου παρέτρεψεν."

3. Ὑπολαβόντος δὲ τοῦ Ἀπολλωνίδου[11] τὸν λόγον καὶ τίς ἦν ἡ δόξα τοῦ Κλεάρχου διαπυθομένου, "παντὶ μᾶλλον" ἔφην "ἀγνοεῖν ἢ σοὶ προσῆκόν ἐστι λόγον ὥσπερ ἀφ' ἑστίας τῆς γεωμετρίας

[1] E, B ; Ἡγησιάναξ -Turnebus ; Ἑρμησιάναξ -Hartman.
[2] E ; μέσῃ -B. [3] Salmasius ; τὸ δ' ἐρεύθει -E, B.
[4] Turnebus ; περιόντα -E, B.
[5] H. C. ; πιέζει πάλιν -E, B ; this sentence has been more drastically altered by Wyttenbach, van Herwerden, Bernardakis, and Adler.
[6] Kepler, Wyttenbach, and implied by Amyot's version ; ἀλλήλων vac. 4-E, 8-B.
[7] Kepler, Wyttenbach ; δια vac. 5-E, 8-B.
[8] Bernardakis ; σχήματος vac. 7-E, B.
[9] Bernardakis (ὁ ἀνήρ -Dübner) ; ἀνὴρ -E, B.
[10] Turnebus ; ὁ ἀριστοτέλης -E, B. It is just possible that ὁ Ἀριστοτέλης was originally a marginal gloss on τοῦ παλαιοῦ.

badly depicted by the words of Agesianax [a]:

> She gleams with fire encircled, but within
> Bluer than lapis show a maiden's eye
> And dainty brow, a visage manifest.

In truth, the dark patches submerge beneath the bright ones which they encompass and confine them, being confined and curtailed by them in turn; and they are thoroughly intertwined with each other ⟨so as to⟩ make the ⟨delineation⟩ of the figure resemble a painting. ⟨This⟩, Aristotle, seemed [b] to be a point not without cogency against your Clearchus [c] also. For the man is yours, since he was an associate of the ancient Aristotle, although he did pervert many doctrines of the School." [d]

3. Apollonides broke in and inquired what the opinion of Clearchus was. "You are the last person," I said, "who has any right not to know a theory of which geometry is, as it were, the very hearth and

[a] Schmid (Christ-Schmid-Stählin, *Gesch. der griech. Litteratur*[6], ii. 1, p. 164, n. 5) assumes that the verses here quoted are from the astronomical poem of Hegesianax; so also Susemihl (*Gesch. der griech. Litteratur in der Alexandrinerzeit*, ii, p. 33, n. 19), Schaefer (*R.E.* i. 795), and Stähelin (*R.E.* vii. 2603. 59 ff.). Powell (*Collectanea Alexandrina*, p. 8) prints the verses as fragment 1 of the *Phaenomena* of Hegesianax but observes that Cod. A Catalogi Interpretum Arati gives Ἀγησιάναξ.

[b] *i.e.* in the earlier discussion which Lamprias is now relating for Sulla's benefit.

[c] Clearchus of Soli, pupil of Aristotle; Wehrli, *Die Schule des Aristoteles*, Heft III: *Klearchos*, frag. 97 (*cf. A.J.P.* lxx [1949], pp. 417-418).

[d] For ὁ Περίπατος, "the Promenade," used to designate the school of Aristotle, *cf. De Musica*, 1131 F, and "the Peripatetics" in *Adv. Coloten*, 1115 A-B, and *Sulla*, xxvi (468 B).

[11] Editors (*cf.* 921 B); ἀπολλωνιάδου -E, B.

(920) ὁρμώμενον· λέγει γὰρ ἁνὴρ[1] εἰκόνας ἐσοπτρικὰς εἶναι καὶ εἴδωλα τῆς μεγάλης θαλάσσης ἐμφαινό-
921 μενα τῇ σελήνῃ τὸ καλούμενον πρόσωπον· ἥ τε γὰρ ὄψις[2] ἀνακλωμένη πολλαχόθεν ἅπτεσθαι τῶν οὐ κατ' εὐθυωρίαν[3] ὁρωμένων πέφυκεν, ἥ τε πανσέληνος αὐτὴ πάντων ἐσόπτρων ὁμαλότητι καὶ στιλπνότητι κάλλιστόν ἐστι καὶ καθαρώτατον. ὥσπερ οὖν τὴν ἶ⟨ριν⟩[4] οἴεσθ' ὑμεῖς ἀνακλωμένης ἐπὶ τὸν ἥλιον τῆς ὄψεως ἐνορᾶσθαι τῷ νέφει λαβόντι νοτερὰν ἡσυχῇ λειότητα καὶ ⟨πῆ⟩ξιν,[5] οὕτως ἐκεῖνος ἐν-
B ορᾶσθαι τῇ σελήνῃ τὴν ἔξω θάλασσαν οὐκ ἐφ' ἧς ἐστι χώρας ἀλλ' ὅθεν ἡ κλάσις ἐποίησε τῇ ὄψει[6] τὴν ἐπαφὴν αὐτῆς καὶ τὴν ἀνταύγειαν· ὥς που πάλιν ὁ

[1] Dübner (" vir ille " -Kepler) ; ἀνὴρ -E, B.
[2] Turnebus, Vulcobius, Kepler ; ἴτυς -E, B.
[3] E ; κατευθυωρίαν -B.
[4] Xylander, Turnebus ; τὴν ἶ vac. 1-3-E (at end of line) ; τὴν vac. 4-B.
[5] Turnebus, Vulcobius (*cf. Quaest. Conviv.* 691 F, *Amatorius*, 765 E, and Aristotle's *Meteorology*, 382 b 31 ff.) ; καὶ vac. 2 ξιν -E, B.
[6] Wyttenbach ; τὴν ὄψιν -E, B.

[a] Similar theories are referred to by Aëtius, ii. 30. 1 (*Dox. Graeci*, p. 361 b 10-13) = Stobaeus, *Eclogae*, i. 26. 4 ; Lucian, *Icaromenippus*, § 20 ; Simplicius, *De Caelo*, p. 457. 15-16. Such a theory is recorded and refuted by Ibn Al-Haitham, the Arabic astronomer of the tenth and eleventh centuries (*cf.* Schoy's translation, pp. 1-2 and 5-6). Emperor Rudolph II believed the spots on the moon to be the reflection of Italy and the large Italian islands (*cf.* Kepler, *Opera Omnia*, ii, p. 491 cited by Pixis, *Kepler als Geograph*, p. 102) ; and A. von Humboldt (*Kosmos*, iii, p. 544 [Stuttgart, 1850]) tells of a Persian from Ispahan who assured him that what we see in the moon is the map of our earth (*cf.* Ebner, *Geographische Hinweise und Anklänge in Plutarchs Schrift, de facie*, p. 13, n. 3).

home. The man, you see, asserts that what is called the face consists of mirrored likenesses, that is images of the great ocean reflected in the moon,[a] for the visual ray when reflected naturally reaches from many points objects which are not directly visible and the full moon is itself in uniformity and lustre [b] the finest and clearest of all mirrors. Just as you think, then, that the reflection of the visual ray to the sun accounts for the appearance of the ⟨rainbow⟩ in a cloud where the moisture has become somewhat smooth and ⟨condensed⟩,[c] so Clearchus thought that the outer ocean is seen in the moon, not in the place where it is but in the place whence the visual ray has been deflected to the ocean and the reflection of the ocean to us.

[b] *i.e.* in the evenness and polish of its surface.

[c] For the rainbow as a reflection of the sun in the cloud *cf. De Iside*, 358 F, *Amatorius*, 765 E-F (where there is a strong verbal similarity to the present passage), *De Placitis*, 894 C-F (=Aëtius, iii. 5, 3-10 and 11 [*Dox. Graeci*, pp. 372-373]). According to Aëtius, iii. 5. 11 (=*De Placitis*, 894 F) the theory was held by Anaxagoras (*cf.* frag. B 19=ii, p. 41. 8-11 [Diels-Kranz]). It is developed by Aristotle in *Meteorology*, iii. 4, 373 a 32—375 b 15 (*cf.* Areius Didymus's *Epitome*, frag. 14=*Dox. Graeci*, p. 455. 14 ff., and Seneca, *Nat. Quaest.* i. 3). Diogenes Laertius, vii. 152 cites Posidonius for the definition ἶριν δ' εἶναι . . . ὡς Ποσειδώνιός φησιν . . . ἔμφασιν ἡλίου τμήματος ἢ σελήνης ἐν νέφει δεδροσισμένῳ, κοίλῳ καὶ συνεχεῖ πρὸς φαντασίαν, ὡς ἐν κατόπτρῳ φανταζομένην κατὰ κύκλου περιφέρειαν (*cf.* Seneca, *Nat. Quaest.* i. 5. 13); and Adler (*Diss. Phil. Vind.* x, pp. 128-129) contends that Posidonius was Plutarch's source for the formulation of the theory. Plutarch's οἴεσθ' ὑμεῖς, however, addressed to Apollonides must be intended to ascribe the theory generally to "you mathematicians"; and this is confirmed by the passage of *De Iside* cited above, which reads: καὶ καθάπερ οἱ μαθηματικοὶ τὴν ἶριν . . . λέγουσι. . . . On the difference between the theories of Aristotle and Posidonius *cf.* O. Gilbert, *Die meteorologischen Theorien des griechischen Altertums*, pp. 614-616.

(921) Ἀγησιάναξ εἴρηκεν

ἢ[1] πόντου μέγα κῦμα καταντία κυμαίνοντος
δείκελον ἰνδάλλοιτο πυριφλεγέθοντος ἐσόπτρου."

4. Ἡσθεὶς[2] οὖν ὁ Ἀπολλωνίδης "ὡς ἴδιον" εἶπε "καὶ καινὸν ὅλως τὸ σκευώρημα τῆς δόξης, τόλμαν δέ τινα καὶ μοῦσαν ἔχοντος ἀνδρός· ἀλλὰ πῇ τὸν ἔλεγχον αὐτῷ προσῆγες;"[3] "πρῶτον μὲν" εἶπον "ᾗ[4] μία φύσις τῆς ἔξω θαλάσσης ἐστί, σύρρουν καὶ συνεχὲς ⟨ἑαυτῷ⟩[5] πέλαγος, ἡ δ' ἔμφασις οὐ μία τῶν ἐν τῇ σελήνῃ μελασμάτων ἀλλ' οἷον ἰσθμοὺς
C ἔχουσα, τοῦ λαμπροῦ διαιροῦντος καὶ διορίζοντος τὸ σκιερόν. ὅθεν ἑκάστου τόπου χωρισθέντος καὶ πέρας ἴδιον ἔχοντος αἱ τῶν φωτεινῶν ἐπιβολαὶ τοῖς σκοτεινοῖς ὕψους εἰκόνα καὶ βάθους[6] λαμβάνουσαι τὰς περὶ τὰ ὄμματα καὶ τὰ χείλη εἰκόνας φαινομένας ὁμοιότατα διετύπωσαν· ὥστ' ἢ πλείονας ἔξω θαλάσσας ὑποληπτέον ἰσθμοῖς τισι καὶ ἠπείροις ἀπολαμβανομένας, ὅπερ ἐστὶν ἄτοπον καὶ ψεῦδος, ἢ μιᾶς οὔσης οὐ πιθανὸν εἰκόνα διεσπασμένην οὕτως ἐμφαίνεσθαι. ἐκεῖνο μὲν γὰρ ἐρωτᾶν ἀσφαλέστερόν ἐστιν ἢ ἀποφαίνεσθαι σοῦ παρόντος, εἰ, τῆς οἰκουμένης εὖρος ἐχούσης[7] καὶ μῆκος, ἐνδέχεται
D πᾶσαν ὡσαύτως ἀπὸ τῆς σελήνης ὄψιν ἀνακλωμένην ἐπιθιγγάνειν τῆς θαλάσσης καὶ τοῖς ἐν αὐτῇ τῇ μεγάλῃ θαλάττῃ πλέουσι νὴ Δία καὶ οἰκοῦσιν,

[1] E, B: ᾗ -Emperius.
[2] Xylander; πεισθεὶς -E, B.
[3] Adler (*Wiener Studien*, xxxi [1909], p. 306, *cf. Zwei Beiträge*, etc., p. 7); προσῆγε -E, B.
[4] Wyttenbach; εἰ -E, B.
[5] Adler; συνεχὲς vac. 5-E, B.
[6] ὕψους . . . βάθους -Leonicus; ὕφους . . . βάθος -E, B.
[7] Leonicus; ἴσης -E, B.

So Agesianax again has somewhere said :

> Or swell of ocean surging opposite
> Be mirrored in a looking-glass of flame." [a]

4. Apollonides was delighted. " What an original and absolutely novel contrivance the hypothesis is," he said, " the work of a man of daring and culture ; but how did you proceed to bring your counter-argument against it ? " " In the first place," I said, " in that, although the outer ocean is a single thing, a confluent and continuous sea,[b] the dark spots in the moon do not appear as one but as having something like isthmuses between them, the brilliance dividing and delimiting the shadow. Hence, since each part is separated and has its own boundary, the layers of light upon shadow,[c] assuming the semblance of height and depth, have produced a very close likeness of eyes and lips. Therefore, one must assume the existence of several outer oceans separated by isthmuses and mainlands, which is absurd and false ; or, if the ocean is single, it is not plausible that its reflected image be thus discontinuous. Tell me whether—for in your presence it is safer to put this as a question than as an assertion—whether it is possible, though the inhabited world has length and breadth, that every visual ray when reflected from the moon should in like manner reach the ocean, even the visual rays of those who are sailing in the great ocean itself, yes and who dwell in it as the Britons

[a] Powell (*Collectanea Alexandrina*, p. 9) prints these lines as fragment 2 of the *Phaenomena* of Hegesianax ; see note *a* on p. 39 *supra*.

[b] *Cf.* Strabo, i. 1. 8 (i, p. 6. 4-7 [Meineke]).

[c] The language is that of painting ; *cf.* Lucian, *Zeuxis*, 5 : τῶν χρωμάτων ἀκριβῆ τὴν κρᾶσιν καὶ εὔκαιρον τὴν ἐπιβολὴν ποιήσασθαι.

(921) ὥσπερ Βρεττανοῖς, καὶ ταῦτα μηδὲ τῆς γῆς, ὥς φατε,[1] πρὸς τὴν σφαῖραν τῆς σελήνης κέντρου λόγον ἐπεχούσης;[2] τουτὶ μὲν οὖν" ἔφην "σὸν ἔργον ἐπισκοπεῖν τὴν δὲ πρὸς τὴν σελήνην ἢ ⟨καθόλου⟩[3] τῆς ὄψεως κλάσιν οὐκέτι σὸν οὐδ' Ἱππάρχου· καίτοι γ' ἐφιλέργει ἀν⟨ὴρ⟩[4] ἀλλὰ πολλοῖς οὐκ ἀρέσκει φυσιολογῶν περὶ τῆς ὄψεως αὐτῆς, ⟨ἣν⟩[5]
E ὁμοιοπαθῆ[6] κρᾶσιν ἴσχειν καὶ σύμπηξιν εἰκός ἐστι μᾶλλον ἢ πληγάς τινας καὶ ἀποπηδήσεις οἵας ἔπλαττε τῶν ἀτόμων Ἐπίκουρος. οὐκ ἐθελήσει δέ, οἶμαι, τὴν σελήνην ἐμβριθὲς ὑποθέσθαι σῶμα καὶ στερεὸν ἡμῖν[7] ὁ Κλέαρχος ἀλλ' ἄστρον αἰθέριον καὶ φωσφόρον, ὥς φατε· τοιαύτῃ ⟨δὲ⟩[8] τὴν ὄψιν

[1] Wyttenbach (implied in versions of Amyot and Kepler); ἔφατε -E, B.

[2] After ἐπεχούσης. E has a lacuna of 2 letter spaces.

[3] H. C. (*cf. Class. Phil.* xlvi [1951], pp. 138-139); σελήνην ἢ τῆς -E, B; σελήνην τῆς -Basiliensis.

[4] H. C. (*cf.* Ptolemy, *Syntaxis*, iii. 1 [i. 1, p. 191. 19-20, Heiberg]: τῷ Ἱππάρχῳ ἀνδρὶ φιλοπόνῳ τε ὁμοῦ καὶ φιλαλήθει); καίτοι γε φίλε πρίαμ vac. 2-E, 3-B; καίτοι γε φιλοπράγμων ἀνήρ -Pohlenz (*Phil. Woch.* xxxii [1912], pp. 649-650); καίτοι γ' ὤφειλε προτιμᾶσθαι -Apelt (Jena, 1905).

[5] Wyttenbach: αὐτὴν -E, B.

[6] Adler, *Zwei Beiträge*, p. 8 (*cf. De E*, 390 B, *De Defectu*, 433 D; Plato, *Timaeus*, 45 C; so in *Quaest. Conviv.* 626 D read ὁμοιοπαθῆ with Bernardakis instead of Hubert's ὁμοπαθῆ); ὁμοπαθῆ -E, B.

[7] H. C.; ὑμῖν -E, B, and all editors, though the versions of Xylander, Kepler, and Wyttenbach have "nobis" and that of Amyot has "nous."

[8] Wyttenbach: τοιαύτῃ τὴν ὄψιν -E, B; τοιαύτην τὴν ὄψιν -Basiliensis.

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[a] *i.e.* "you mathematicians"; see οἴεσθ' ὑμεῖς in 921 A *supra*. The reference is to the eccentrics of Hipparchus's theory of the motion of the moon. For defence of the text

do, and that too even though the earth, as you say,[a] does not have the relation of centre to the orbit of the moon. Well, this," I said, "it is your business to consider; but the reflection of vision either in respect to the moon or ⟨in general⟩ is beyond your province and that of Hipparchus too.[b] Although Hipparchus was industrious, still many find him unsatisfactory in his explanation of the nature of vision itself, ⟨which⟩ is more likely to involve a sympathetic compound and fusion [c] than any impacts and rebounds such as those of the atoms that Epicurus invented.[d] Moreover, Clearchus, I think, would refuse to assume with us that the moon is a body of weight and solidity instead of an ethereal and luminiferous star as you say [e]; ⟨and⟩ such a moon ought

and a detailed interpretation of this sentence *cf. Class. Phil.* xlvi (1951), pp. 137-138.

[b] Because Hipparchus was a mathematician and not a physicist (φυσιολόγος); on the difference *cf.* Geminus in Simplicius, *Phys.* pp. 291. 23–292. 29, and the phrase, διὰ τὸ μὴ ἐφωδιάσθαι ἀπὸ φυσιολογίας, which Theon of Smyrna (p. 188. 19-20) uses of Hipparchus.

[c] Plato's theory; *cf. Timaeus*, 45 c and *De Placitis*, 901 B-C = Aëtius, iv. 13. 11 (*Dox. Graeci*, p. 404).

[d] *Cf. Adv. Coloten*, 1112 c and *De Placitis*, 901 A-B = Aëtius, iv. 13. 1 (*Dox. Graeci*, p. 403. 2-4). The present passage seems to imply that Hipparchus's explanation of vision resembled that of Epicurus. In *De Placitis*, 901 B = Aëtius, iv. 13. 9 (*Dox. Graeci*, p. 404) a theory of vision is attributed to Hipparchus, however, which does not at all resemble that of the atomists: but the name Hipparchus there is probably a mistake, *cf. Class. Phil.* xlvi (1951), p. 154, n. 6.

[e] Lamprias addresses Apollonides and Aristotle, for that the moon is an ethereal and luminiferous star is the Peripatetic theory (*cf.* the statement of Aristotle at 928 E *infra* and the references in the note there) and that is why it is ascribed to Clearchus. Obviously then ὑμῖν of the MSS. must

(921) [ἢ] θραύειν[1] προσήκει καὶ ἀποστρέφειν, ὥστ' οἴχεσθαι τὴν ἀνάκλασιν. εἰ δὲ παραιτεῖταί[2] τις ἡμᾶς, ἐρησόμεθα[3] πῶς μόνον πρόσωπόν ἐστιν ἐν τῇ σελήνῃ τὸ τῆς θαλάσσης ἔσοπτρον ἄλλῳ δ' οὐδενὶ τῶν τοσούτων ἀστέρων ἐνορᾶται· καίτοι τό γ' εἰκὸς ἀπαιτεῖ πρὸς ἅπαντας ἢ πρὸς μηδένα τοῦτο[4]
F πάσχειν τὴν ὄψιν. ἀλλ' ⟨ἐάσωμεν ταῦτα, καὶ σύ,"⟩[5] πρὸς τὸν Λεύκιον ἔφην[6] ἀποβλέψας, "ὃ πρῶτον ἐλέχθη τῶν ἡμετέρων ὑπόμνησον."

5. Καὶ ὁ Λεύκιος "ἀλλὰ μὴ δόξωμεν" ἔφη "κομιδῇ προπηλακίζειν τὸν Φαρνάκην οὕτω τὴν Στωικὴν δόξαν ἀπροσαύδητον ὑπερβαίνοντες, εἰπὲ δή τι πρὸς τὸν ἄνδρα πάντως,[7] ἀέρος μῖγμα καὶ μαλακοῦ πυρὸς ὑποτιθέμενον τὴν σελήνην εἶθ' οἷον ἐν γαλήνῃ φρίκης ὑποτρεχούσης φάσκοντα τοῦ ἀέρος διαμελαίνοντος ἔμφασιν γίγνεσθαι μορφοειδῆ." ⟨"μάλα⟩[8] χρηστῶς γ'" εἶπον "ὦ Λεύκιε, τὴν[9] ἀτοπίαν εὐφήμοις περιαμπέχεις ὀνόμασιν· οὐχ οὕτως[10] δ' ὁ ἑταῖρος ἡμῶν,[11] ἀλλ' ὅπερ

[1] Turnebus, Vulcobius ; ἢ θραῦσιν -E, B.
[2] Wyttenbach ; προσδεῖταί -E, B.
[3] Wyttenbach after the versions of Amyot and Xylander ; χρησόμεθα -E, B.
[4] E ; τούτων -B.
[5] Adler ; ἀλλ vac. 16-E, 19-B.
[6] Wyttenbach ; ἐφ' ὧν -E, B : εἶπον -Turnebus.
[7] -Anon., Aldine, R.J. 94, printed by Wyttenbach without note ; παντὸς -E, B : πα⟨γέ⟩ντος -Pohlenz (*Die Stoa*, ii, p. 111).
[8] Adler ; μορφοειδῆ. vac. 5-E (at end of line), 4-B.
[9] B ; Λεύκιε vac. 3-E.
[10] E ; οὕτω -B.
[11] Aldine, Basiliensis ; ὑμῶν -E, B.

be an error and should be changed to ἡμῖν, for that the moon is a body with weight and solidity is the opinion of the Academy, *i.e.* of Lamprias, Lucius, and their circle (*cf.* 926 c, 928 c, 931 b-c *infra*).

to shatter and divert the visual ray so that reflection would be out of the question. But if anyone dismisses our objections, we shall ask how it is that the reflection of the ocean exists as a face only in the moon and is seen in none of all the many other stars, although reason requires that all or none of them should affect the visual ray in this fashion. But ⟨let us have done with this ; and do you⟩," I said with a glance at Lucius, " recall to me what part of our position was stated first."

5. Whereat Lucius said : " Nay, lest we give the impression of flatly insulting Pharnaces by thus passing over the Stoic opinion unnoticed, do now by all means address some remark to the gentleman who, supposing the moon to be a mixture of air and gentle fire, then says that what appears to be a figure is the result of the blackening of the air as when in a calm water there runs a ripple under the surface." [a] " You are ⟨very⟩ nice, Lucius," I said, " to dress up the absurdity in respectable language. Not so our

[a] Von Arnim (*S.V.F.* ii, p. 198) prints this and some of the subsequent sentences as frag. 673 among the Physical Fragments of Chrysippus. For the Stoic doctrine that the moon is a mixture of air and fire *cf. De Placitis*, 891 B and 892 B (=Aëtius, ii. 25. 5 [*Dox. Graeci*, p. 356] and ii. 30. 5 [*Dox. Graeci*, p. 361]), and *S.V.F.* ii, p. 136. 32. The "gentle fire" here mentioned is the πῦρ τεχνικόν as distinguished from destructive fire (*cf. S.V.F.* i, p. 34. 22-27 and ii, p. 200. 14-16). For the Stoic explanation of the face in the moon *cf. S.V.F.* ii, p. 199. 3-5 (=Philo Judaeus, *De Somniis*, i, § 145) ; and for the simile of the ripple *cf. Iliad*, vii. 63-64.

(921) ἀληθὲς ἦν ἔλεγεν, ὑπωπιάζειν[1] αὐτοὺς τὴν σελήνην
922 σπίλων καὶ μελασμῶν ἀναπιμπλάντας, ὁμοῦ μὲν Ἄρτεμιν καὶ Ἀθηνᾶν ἀνακαλοῦντας ὁμοῦ δὲ σύμμιγμα[2] καὶ φύραμα ποιοῦντας ἀέρος ζοφεροῦ καὶ πυρὸς ἀνθρακώδους, οὐκ ἔχουσαν ἔξαψιν οὐδ' αὐγὴν οἰκείαν, ἀλλὰ δυσκρινές τι σῶμα τυφόμενον ἀεὶ καὶ πυρίκαυστον ὥσπερ τῶν κεραυνῶν τοὺς ἀλαμπεῖς καὶ ψολόεντας ὑπὸ τῶν ποιητῶν προσαγορευομένους. ὅτι μέντοι πῦρ ἀνθρακῶδες, οἷον οὗτοι τὸ τῆς σελήνης ποιοῦσιν, οὐκ ἔχει διαμονὴν οὐδὲ σύστασιν ὅλως ἐὰν μὴ στερεᾶς ὕλης καὶ στε-
B γούσης ἅμα καὶ τρεφούσης ἐπιλάβηται βέλτιον οἶμαι συνορᾶν ἐνίων φιλοσόφων τοὺς ἐν παιδιᾷ λέγοντας τὸν Ἥφαιστον εἰρῆσθαι χωλὸν ὅτι τὸ πῦρ ξύλου χωρὶς ὥσπερ οἱ χωλοὶ βακτηρίας οὐ πρόεισιν. εἰ οὖν ἡ σελήνη πῦρ ἐστι, πόθεν αὐτῇ τοσοῦτος ἐγγέγονεν ἀήρ; ὁ γὰρ ἄνω καὶ κύκλῳ φερόμενος οὑτοσὶ τόπος οὐκ ἀέρος ἀλλὰ κρείττονος οὐσίας καὶ πάντα λεπτύνειν καὶ συνεξάπτειν φύσιν ἐχούσης ἐστίν· εἰ δ' ἐγγέγονε,[3] πῶς οὐκ οἴχεται μεταβάλλων

[1] Basiliensis, Turnebus ; ὑποπιέζειν -E, B.
[2] Stephanus (1624) ; σύμμιγα -E, B.
[3] -Anon., Aldine, R.J. 94 ; δὲ γέγονε -E, B.

[a] See 929 B and 929 F *infra*. This comrade was the leader of the earlier discussion, which is here being recapitulated, and is probably to be identified with Plutarch himself (so Hirzel, *Der Dialog*, ii, p. 184, n. 2, and Hartman, *De Plutarcho*, p. 557) ; *cf. De Tuenda Sanitate*, 122 F for a similar situation and *Quaest. Conviv.* 643 C, where Hagias addresses Plutarch as " comrade."

[b] *Cf. S.V.F.* ii, p. 212. 38-39 (Chrysippus), iii, p. 217. 12-13 (Diogenes of Babylon) ; in general *Quaest. Conviv.* 658 F—659 A, and Roscher, *Über Selene und Verwandtes*, p. 116.

comrade [a]; but he said what is true, that they blacken the Moon's eye defiling her with blemishes and bruises, at one and the same time addressing her as Artemis [b] and Athena [c] and making her a mass compounded of murky air and smouldering fire neither kindling nor shining of herself, an indiscriminate kind of body, forever charred and smoking like the thunderbolts that are darkling and by the poets called lurid.[d] Yet a smouldering fire, such as they suppose that of the moon to be, cannot persist or subsist at all unless it get solid fuel that shelters and at the same time nourishes it [e]; this some philosophers, I believe, see less clearly than do those who say in jest that Hephaestus is said to be lame because fire without wood, like the lame without a stick, makes no progress.[f] If the moon really is fire, whence came so much air in it? For the region that we see revolving above us is the place not of air but of a superior substance, the nature of which is to rarefy all things and set them afire; and, if air did come to be there, why has it not been etherealized by the fire [g]

[c] *Cf.* 938 B *infra.* In *De Iside*, 354 C Isis, who later is identified with the moon (372 D), is identified with Athena (*cf.* 376 A). *Cf.* Roscher, *op. cit.* pp. 123 f. (on the supposed fragment of Aristotle there cited see V. Rose, *Aristoteles Pseudepigraphus*, pp. 616 [no. 4] and 617).

[d] *Cf. Odyssey*, xxiii. 330 and xxiv. 539; Hesiod, *Theogony*, 515; Pindar, *Nemean*, x. 71; Aristotle, *Meteorology*, 371 a 17-24.

[e] See 934 B-C *infra.*

[f] *Cf.* Cornutus, chap. 18 (p. 33. 18-22 Lang); *Heracliti Quaestiones Homericae*, § 26 (p. 41. 2-6 Oelmann).

[g] *Cf. S.V.F.* ii, p. 184. 2-5: . . . ἐξαιθεροῦσθαι πάντα . . . εἰς πῦρ αἰθερῶδες ἀναλυομένων πάντων. The "ether" here is Stoic ether, *i.e.* a kind of fire (*cf. De Primo Frigido*, 951 C-D and note *d* on 928 D *infra*), not Aristotle's "fifth essence," which does not enter into the process of the alteration of simple bodies.

(922) εἰς ἕτερον εἶδος ὑπὸ τοῦ πυρὸς ἐξαιθερωθεὶς ἀλλὰ σῴζεται καὶ συνοικεῖ πυρὶ τοσοῦτον χρόνον ὥσπερ ἥλοις[1] ἀραρὼς ἀεὶ τοῖς αὐτοῖς[2] μέρεσι καὶ συγγεγομφωμένος; ἀραιῷ μὲν γὰρ ὄντι καὶ συγ-
C κεχυμένῳ μὴ μένειν ἀλλὰ σφάλλεσθαι προσήκει συμπεπηγέναι δ' οὐ δυνατὸν ἀναμεμιγμένον πυρὶ καὶ μήθ' ὑγροῦ μετέχοντα μήτε γῆς, οἷς μόνοις ἀὴρ συμπήγνυσθαι πέφυκεν. ἡ δὲ ῥύμη καὶ τὸν ἐν λίθοις ἀέρα καὶ τὸν ἐν ψυχρῷ μολίβδῳ[3] συνεκκάει, μή τί[4] γε δὴ τὸν ἐν πυρὶ δινουμένῳ μετὰ τάχους τοσούτου. καὶ γὰρ Ἐμπεδοκλεῖ δυσκολαίνουσι πάγον ἀέρος χαλαζώδη ποιοῦντι τὴν σελήνην ὑπὸ τῆς τοῦ πυρὸς σφαίρας περιεχόμενον αὐτοὶ δὲ τὴν σελήνην σφαῖραν οὖσαν πυρὸς ἀέρα φασὶν ἄλλον ἄλλῃ διεσπασμένον περιέχειν καὶ ταῦτα
D μήτε ῥήξεις ἔχουσαν ἐν ἑαυτῇ μήτε βάθη καὶ κοιλότητας, ἅπερ οἱ γεώδη ποιοῦντες ἀπολείπουσιν, ἀλλ' ἐπιπολῆς δηλονότι τῇ κυρτότητι ἐπικείμενον. τοῦτο δ' ἐστὶ καὶ πρὸς διαμονὴν ἄλογον καὶ πρὸς θέαν ἀδύνατον ἐν ταῖς πανσελήνοις· διωρίσθαι[5] γὰρ οὐκ ἔδει μέλανα καὶ σκιερὸν ἀλλ' ἀμαυροῦσθαι κρυπτόμενον ἢ συνεκλάμπειν ὑπὸ τοῦ ἡλίου καταλαμβανομένης τῆς σελήνης. καὶ γὰρ παρ' ἡμῖν

[1] H. C. (*cf. Class. Phil.* xlvi [1951], p. 139) : ἧλος -E, B.
[2] E : τοῖς αὐτοῖς ἀεὶ -B.
[3] E ; μολῦβδω (*i.e.* μολύβδῳ) -B.
[4] E ; μή τοί -B.
[5] Emperius ; διορίσασθαι -E, B.

[a] *Cf. De Primo Frigido*, 951 D, 952 B, 953 D—954 A : but the Stoic opinion given in 949 B (= *S.V.F.* ii, p. 142. 6-10) was that solidification (πῆξις) is a state produced in water by air, and Galen reports (*S.V.F.* ii, p. 145. 8-11) that according

and in this transformation disappeared but instead has been preserved as a housemate of fire this long time, as if nails had fixed it forever to the same spots and riveted it together? Air is tenuous and without configuration, and so it naturally slips and does not stay in place; and it cannot have become solidified if it is commingled with fire and partakes neither of moisture nor of earth by which alone air can be solidified.[a] Moreover, velocity ignites the air in stones and in cold lead, not to speak of the air enclosed in fire that is whirling about with such great speed.[b] Why, they are vexed by Empedocles because he represents the moon to be a hail-like congelation of air encompassed by the sphere of fire[c]; but they themselves say that the moon is a sphere of fire containing air dispersed about it here and there, and a sphere moreover that has neither clefts nor depths and hollows, such as are allowed by those who make it an earthy body, but has the air evidently resting upon its convex surface. That it should so remain is both contrary to reason and impossible to square with what is observed when the moon is full. On that assumption there should have been no distinction of dark and shadowy air; but all the air should become dark when occulted, or when the moon is caught by the sun it should all shine out with an even light. For with us too, while

to the Stoics the hardness and resistance of earth are caused by fire and air.

[b] *Cf.* Aristotle, *De Caelo*, 289 a 19-32, *Meteorology*, 341 a 17-19; Ideler, *Aristotelis Meteorologica*, i, pp. 359-360.

[c] Empedocles, A 60 (i, p. 294. 24-31 [Diels-Kranz]); *cf.* [Plutarch], *Stromat.* § 10 = *Dox. Graeci*, p. 582. 12-15 = i, p. 288. 30-32 (Diels-Kranz); and C. E. Millard, *On the Interpretation of Empedocles*, pp. 65-68.

(922) ὁ μὲν ἐν βάθεσι καὶ κοιλώμασι τῆς γῆς, οὗ μὴ δίεισιν αὐγή,[1] διαμένει[2] σκιώδης καὶ ἀφώτιστος ὁ δ' ἔξωθεν τῇ γῇ περικεχυμένος φέγγος ἴσχει καὶ χρόαν αὐγοειδῆ· πρὸς πᾶσαν μὲν γάρ ἐστι ποιότητα E καὶ δύναμιν εὐκέραστος ὑπὸ μανότητος μάλιστα δὲ φωτὸς ἂν ἐπιψαύσῃ μόνον, ὥς φατε, καὶ θίγῃ δι' ὅλου τρεπόμενος ἐκφωτίζεται. ταὐτὸν[3] οὖν τοῦτο καὶ τοῖς εἰς βάθη τινὰ καὶ φάραγγας συνωθοῦσιν ἐν τῇ σελήνῃ τὸν ἀέρα παγκάλως[4] ἔοικε βοηθεῖν ὑμᾶς τε διεξελέγχει τοὺς ἐξ ἀέρος καὶ πυρὸς οὐκ οἶδ' ὅπως μιγνύντας αὐτῆς καὶ συναρμόζοντας τὴν σφαῖραν· οὐ γὰρ οἷόν τε λείπεσθαι σκιὰν ἐπὶ τῆς ἐπιφανείας ὅταν ὁ ἥλιος ἐπιλάμπῃ τῷ φωτὶ πᾶν F ὁπόσον καὶ ἡμεῖς ἀποτεμνόμεθα τῇ ὄψει τῆς σελήνης."

6. Καὶ ὁ Φαρνάκης ἔτι μου λέγοντος "τοῦτ' ἐκεῖνο πάλιν" εἶπεν "ἐφ' ἡμᾶς ἀφῖκται τὸ περίακτον ἐκ τῆς Ἀκαδημείας[5]· ἐν τῷ πρὸς ἑτέρους λέγειν διατρίβοντας ἑκάστοτε μὴ παρέχειν ἔλεγχον ὧν αὐτοὶ λέγουσιν ἀλλ' ἀπολογουμένοις δεῖ[6] χρῆ-

[1] Stephanus (1624), *cf.* 929 E *infra* ; αὕτη -E, B.
[2] Stephanus (implied by versions of Amyot and Kepler) ; διαμελαίνει -E, B.
[3] Benseler ; ταὐτὸ -E, B.
[4] Wyttenbach ; κἂν καλῶς -E, B.
[5] Dübner : ἀκαδημίας -E, B.
[6] E, B ; ἀεὶ -Wyttenbach (implied by Amyot's version).

[a] Chrysippus, frag. 570 (*S.V.F.* ii, p. 178. 20-22), *cf. De Primo Frigido*, 952 F. With the words ὥς φατε Lamprias addresses Pharnaces as representative of the Stoics, for whose doctrine of the instantaneous alteration of air by light see 930 F *infra* and the references there ; *cf.* especially κατὰ νύξιν ἢ ψαῦσιν there with ἂν ἐπιψαύσῃ μόνον, ὥς φατε, here. Aristotle originated the doctrine that the transparent medium is altered instantaneously throughout its whole extent by

the air in the depths and hollows of the earth, wherever the sun's rays do not penetrate, remains shadowy and unlit, that which suffuses the earth outside takes on brilliance and a luminous colour. The reason is that air, because of its subtility, is delicately attuned to every quality and influence ; and, especially if it touches light or, to use your phrase, merely is tangent to it, it is altered through and through and entirely illuminated.[a] So this same point seems right handsomely to re-enforce those who pack the air on the moon into depths of some kind and chasms, even as it utterly refutes you who make her globe an unintelligible mixture or compound of air and fire—for it is not possible [b] that a shadow remain upon the surface when the sun casts his light upon all of the moon that is within the compass of our vision."

6. Even while I was still speaking Pharnaces spoke : " Here we are faced again with that stock manœuvre of the Academy [c] : on each occasion that they engage in discourse with others they will not offer any accounting of their own assertions but must keep

the mere presence of light at any point (*cf. De Sensu*, 446 b 27—447 a 10 and *De Anima*, 418 b 9 ff.).

[b] *i.e.* on the Stoic theory.

[c] The word τὸ περίακτον occurs in *Comp. Lys. Sulla*, iii, 476 E, where it seems to mean " the old saw," though it may refer to a proverbial state of " inside out and wrong side to." In *De Gloria Atheniensium*, 348 E Plutarch mentions μηχανὰς ἀπὸ σκηνῆς περιάκτους, but that rather tells against taking τὸ περίακτον as the name of this stage-machine. He uses περιαγωγή in *De Genio Socratis*, 588 D in the sense of " distraction " and in *Praecepta Gerendae Reipublicae*, 819 A in the sense of " a trick of diversion," a sense which certainly suits τὸ περίακτον in the present context. The complaint of Pharnaces is frequently made by the interlocutors of Socrates ; *cf.* Xenophon, *Memorabilia*, iv, 4. 9 ; Plato, *Republic*, 336 C ; Aristotle, *Soph. Elench.* 183 b 6-8.

(922) σθαι μὴ κατηγορῶσιν[1] ⟨οἷς⟩[2] ἂν ἐντυγχάνωσιν. ἐμὲ δ' οὖν οὐκ ἐξάξεσθε τήμερον εἰς τὸ διδόναι λόγον ὧν ἐπικαλεῖτε τοῖς Στωικοῖς, πρὶν εὐθύνας λαβεῖν παρ' ὑμῶν ἄνω τὰ κάτω τοῦ κόσμου ποιούντων." καὶ ὁ Λεύκιος γελάσας "μόνον" εἶπεν
923 "ὦ τάν, μὴ κρίσιν ἡμῖν ἀσεβείας ἐπαγγείλῃς, ὥσπερ Ἀρίσταρχον ᾤετο δεῖν Κλεάνθης[3] τὸν Σάμιον ἀσεβείας προσκαλεῖσθαι[4] τοὺς Ἕλληνας ὡς κινοῦντα τοῦ κόσμου τὴν ἑστίαν ὅτι ⟨τὰ⟩[5] φαινόμενα σῴζειν ἀνὴρ[6] ἐπειρᾶτο μένειν τὸν οὐρανὸν ὑποτιθέμενος ἐξελίττεσθαι δὲ κατὰ λοξοῦ κύκλου τὴν γῆν ἅμα καὶ περὶ τὸν αὑτῆς ἄξονα δινουμένην. ἡμεῖς μὲν οὖν οὐδὲν αὐτοὶ παρ' αὑτῶν λέγομεν, οἱ δὲ γῆν ὑποτιθέμενοι τὴν σελήνην, ὦ βέλτιστε, τί μᾶλλον ὑμῶν[7] ἄνω τὰ κάτω ποιοῦσι τὴν γῆν ἱδρυόντων ἐνταῦθα μετέωρον ἐν τῷ ἀέρι, πολλῷ τινι μείζονα τῆς σελήνης οὖσαν ὡς ἐν τοῖς ἐκλειπτικοῖς πάθεσιν
B οἱ μαθηματικοὶ καὶ ταῖς διὰ τοῦ σκιάσματος παρόδοις τῇ ἐποχῇ[8] τὸ μέγεθος ἀναμετροῦσιν; ἥ τε

[1] H. C.; κατηγοροῦσιν -E, B.
[2] Bernardakis.
[3] Ménage; ἀρίσταρχος . . . κλεάνθη -E, B.
[4] Emperius (*cf.* 925 D *infra*); προκαλεῖσθαι -E, B.
[5] Dübner.
[6] Dübner; ἀνὴρ -E, B.
[7] Xylander (*cf.* 923 E *infra*: φατε ὑμεῖς); ἡμῶν -E, B.
[8] W. L. Bevan; τῆς ἐποχῆς -E, B.

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[a] = *S.V.F.* i, p. 112, frag. 500; the title, "Against Aristarchus," appears in the list of Cleanthes' writings given by Diogenes Laertius, vii. 174. For the theory of Aristarchus *cf.* Plutarch, *Plat. Quaest.* 1006 C; *De Placitis* 891 A = Aëtius, ii. 24. 8 (*Dox. Graeci*, p. 355); Archimedes, *Arenarius*,

their interlocutors on the defensive lest they become the prosecutors. Well, me you will not to-day entice into defending the Stoics against your charges until I have called you people to account for turning the universe upside down." Thereupon Lucius laughed and said : "Oh, sir, just don't bring suit against us for impiety as Cleanthes thought that the Greeks ought to lay an action for impiety against Aristarchus the Samian on the ground that he was disturbing the hearth of the universe because he sought to save ⟨the⟩ phenomena by assuming that the heaven is at rest while the earth is revolving along the ecliptic and at the same time is rotating about its own axis.[a] We [b] express no opinion of our own now ; but those who suppose that the moon is earth, why do they, my dear sir, turn things upside down any more than you [c] do who station the earth here suspended in the air ? Yet the earth is a great deal larger than the moon [d] according to the mathematicians who during the occurrences of eclipses and the transits of the moon through the shadow calculate her magnitude by the length of time that she is obscured.[e] For the

i. 1. 4-7 (*Opera Omnia*, ii, p. 218 Heiberg) ; Sextus Empiricus, *Adv. Math.* x. 174 ; T. L. Heath, *Aristarchus of Samos*, pp. 301 ff.

[b] *i.e.* we Academics, the party which did in fact maintain that the moon is an earthy body.

[c] *i.e.* you Stoics ; *cf.* Achilles, *Isagogê*, 4 = *S.V.F.* ii, frag. 555, p. 175. 36 ff.

[d] This would not have been admitted by most of the Stoics, who thought that the moon is larger than the earth ; but in this Posidonius and possibly others disagreed with the earlier members of the school ; *cf.* Aëtius, ii. 26. 1 (*Dox. Graeci*, p. 357 and p. 68, n. 1), and M. Adler, *Diss. Phil. Vind.* x (1910), p. 155.

[e] *Cf.* Cleomedes, ii. 1, § 80 (p. 146. 18 ff. Ziegler) ; Simplicius, *De Caelo*, p. 471. 6-11.

(923) γὰρ σκιὰ τῆς γῆς ἐλάττων[1] ὑπὸ μείζονος τοῦ φωτίζοντος ἀνατείνει καὶ τῆς σκιᾶς αὐτῆς λεπτὸν ὂν τὸ[2] ἄνω καὶ στενὸν οὐδ' Ὅμηρον, ὥς φασιν,[3] ἔλαθεν, ἀλλὰ τὴν νύκτα 'θοὴν' ὀξύτητι τῆς σκιᾶς προσηγόρευσεν· ὑπὸ τούτου δ' ὅμως ἁλισκομένη ταῖς ἐκλείψεσιν ἡ σελήνη τρισὶ μόλις τοῖς αὑτῆς[4] μεγέθεσιν ἀπαλλάττεται. σκόπει δὴ πόσων ἡ γῆ σεληνῶν ἐστιν, εἰ σκιὰν ἀφίησιν ᾗ[5] βραχυτάτη πλάτος τρισέληνον. ἀλλ' ὅμως ὑπὲρ τῆς σελήνης μὴ πέσῃ δεδοίκατε περὶ δὲ τῆς γῆς ἴσως Αἰσχύλος

[1] B; ἐλάττω -E.
[2] Turnebus; ὄντα -E, B.
[3] Xylander; ὥς φησὶν -E, B.
[4] Stephanus (1624); αὐτῆς -E, B.
[5] ᾗ Anon., Aldine, R.J. 94; ἡ -E, B.

[a] *Cf.* Cleomedes, ii. 2. §§ 93-94 (p. 170. 11 ff. Ziegler); Theon of Smyrna, p. 197. 1 ff. (Hiller); Pliny, *Nat. Hist.* ii. 11 (8), 51.

[b] *Cf. De Defectu Oraculorum*, 410 D. Homer uses the phrase θοὴ νύξ frequently (*e.g. Iliad*, x. 394 [*cf.* Leaf's note *ad loc.*], *Odyssey*, xii. 284). Another θοός, supposedly meaning "pointed," "sharp" and cognate with ἐθόωσα in *Odyssey*, ix. 327, is used of certain islands in *Odyssey*, xv. 299 (*cf.* Strabo, viii. 350-351; Pseudo-Plutarch, *De Vita et Poesi Homeri*, B, 21 [vii, p. 347. 19 ff. Bernardakis]). The latter passage so understood was used to support the hypothesis that θοὴ νύξ referred to the "sharpness" of the earth's shadow: *cf. Heracliti Quaestiones Homericae*, §§ 45-46 (p. 67. 13 ff. Oelmann). Eustathius (*Comment. ad Iliadem*, 814. 15 ff.) mentions besides this another astronomical interpretation of the phrase by Crates of Mallos.

[c] For this temporal dative without ἐν *cf.* Theon of Smyrna, p. 194. 1-3 (Hiller).

shadow of the earth grows smaller the further it extends, because the body that casts the light is larger than the earth[a]; and that the upper part of the shadow itself is taper and narrow was recognized, as they say, even by Homer, who called night 'nimble' because of the 'sharpness' of the shadow.[b] Yet captured by this part in eclipses[c] the moon barely escapes from it in a space thrice her own magnitude. Consider then how many times as large as the moon the earth is, if the earth casts a shadow which at its narrowest is thrice as broad as the moon.[d] All the same, you fear for the moon lest it fall; whereas concerning the earth perhaps Aeschylus has

[d] *Cf. De An. Proc. in Timaeo*, 1028 D where Plutarch ascribes to geometers the approximate calculation of three to one as the ratio of the earth's diameter to that of the moon and of twelve to one as the ratio of the sun's diameter to that of the earth, figures which agree roughly with those of Hipparchus (t : l : s = 1 . $\frac{1}{3}$. 12$\frac{1}{3}$; *cf.* Heath, *Aristarchus of Samos*, pp. 342 and 350 after Hultsch). Hipparchus, however, considered the breadth of the shadow at the moon's mean distance from the earth in eclipses to be 2$\frac{1}{2}$ lunar diameters (Ptolemy, *Syntaxis*, iv. 9 [i, p. 327. 1-4 Heiberg]), while Aristarchus, whose calculations of the moon's diameter Plutarch quotes at 932 B *infra*, declared the shadow to be 2 lunar diameters in breadth (*cf.* Aristarchus, Hypothesis 5 [Heath, *op. cit.* p. 352. 13]; Pappus, *Collectionis Quae Supersunt*, ii, p. 554. 17-18 and p. 556. 14-17 [Hultsch]), the figure given by Cleomedes as well (pp. 146. 18-19 and 178. 8-13 [Ziegler]; *cf.* Geminus, *Elementa*, ed. Manitius, p. 272). Plutarch may here simply have assumed that the ratio of the lunar diameter to the breadth of the shadow would be the same as the Hipparchean ratio of the lunar diameter to the diameter of the earth; but he may also have erroneously supposed that the time taken by the moon to enter the shadow, the time of complete obscuration, and the time taken to leave the shadow equal three diameters instead of two (*cf.* Cleomedes, p. 146. 21-25 [Ziegler] and M. Adler, *Diss. Phil. Vind.* x [1910], p. 156, n. 2).

(923) ὑμᾶς[1] πέπεικεν ὡς ὁ Ἄτλας

C ἕστηκε, κίον'[2] οὐρανοῦ τε καὶ χθονὸς
ὤμοις ἐρείδων, ἄχθος οὐκ εὐάγκαλον.

ἢ[3] τῇ μὲν σελήνῃ κοῦφος ἀὴρ ὑποτρέχει καὶ στερεὸν ὄγκον οὐκ ἐχέγγυος ἐνεγκεῖν τὴν δὲ γῆν κατὰ Πίνδαρον 'ἀδαμαντοπέδιλοι κίονες' περιέχουσι, καὶ διὰ τοῦτο Φαρνάκης αὐτὸς μὲν ἐν ἀδείᾳ τοῦ πεσεῖν τὴν γῆν ἐστιν οἰκτίρει[4] δὲ τοὺς ὑποκειμένους τῇ περιφορᾷ[5] τῆς σελήνης Αἰθίοπας ἢ Ταπροβηνοὺς μὴ βάρος αὐτοῖς ἐμπέσῃ τοσοῦτον. καίτοι τῇ μὲν σελήνῃ βοήθεια πρὸς τὸ μὴ πεσεῖν ἡ κίνησις αὐτὴ D καὶ τὸ ῥοιζῶδες[6] τῆς περιαγωγῆς, ὥσπερ ὅσα ταῖς σφενδόναις ἐντεθέντα τῆς καταφορᾶς κώλυσιν ἴσχει τὴν κύκλῳ περιδίνησιν. ἄγει γὰρ ἕκαστον ἡ κατὰ φύσιν κίνησις, ἂν ὑπ' ἄλλου μηδενὸς ἀποστρέφηται. διὸ τὴν σελήνην οὐκ ἄγει τὸ βάρος ὑπὸ τῆς περιφορᾶς τὴν ῥοπὴν ἐκκρουόμενον. ἀλλὰ μᾶλλον ἴσως λόγον εἶχε θαυμάζειν μένουσαν αὐτὴν παντάπασιν ὥσπερ ἡ γῆ καὶ ἀτρεμοῦσαν.[7] νῦν δ' ἡ[8] σελήνη μὲν ἔχει μεγάλην αἰτίαν τοῦ δεῦρο μὴ φέρεσθαι τὴν δὲ γῆν ἑτέρας κινήσεως ἄμοιρον οὖσαν εἰκὸς ἦν μόνῳ τῷ βαρύνοντι κινεῖν. βαρυτέρα δ' ἐστὶ τῆς σελήνης οὐχ ὅσῳ μείζων ἀλλ' ἔτι μᾶλλον ἅτε δὴ

1 Stephanus (1624); ἡμᾶς -E, B.
2 -Anon., Aldine, R.J. 94, mss. of Aeschylus; κίων -E, B.
3 H. C.; εἰ -E, B; καὶ -Wyttenbach after Amyot; ἐπεὶ -Adler.
4 Editors: οἰκτείρει -E, B.
5 H. C. (*cf. Class. Phil.* xlvi [1951], p. 139); μεταφορᾷ -E, B.
6 E; ῥιζῶδες -B.
7 Emperius (*cf.* 926 A and 939 A *infra*): ἄτρεπτος ἄν. -E, B.
8 Bernardakis; νῦν δὲ -E, B.

persuaded you that Atlas

> Stands, staying on his back the prop of earth
> And sky, no tender burden to embrace.[a]

Or, while under the moon there stretches air unsubstantial and incapable of supporting a solid mass, the earth, as Pindar says, is encompassed by ' steel-shod pillars '[b]; and therefore Pharnaces is himself without any fear that the earth may fall but is sorry for the Ethiopians or Taprobanians,[c] who are situated under the circuit of the moon, lest such a great weight fall upon them. Yet the moon is saved from falling by its very motion and the rapidity of its revolution, just as missiles placed in slings are kept from falling by being whirled around in a circle.[d] For each thing is governed by its natural motion unless it be diverted by something else. That is why the moon is not governed by its weight : the weight has its influence frustrated by the rotatory motion. Nay, there would be more reason perhaps to wonder if she were absolutely unmoved and stationary like the earth. As it is, while ⟨the⟩ moon has good cause for not moving in this direction, the influence of weight alone might reasonably move the earth, since it has no part in any other motion ; and the earth is heavier than the moon not merely in proportion to its greater size but

[a] Aeschylus, *Prometheus Vinct.* 351-352 (Smyth).
[b] Pindar, frag. 88 (Bergk) = 79 (Bowra).
[c] *i.e.* the Sinhalese ; *cf.* Strabo, ii. 1. 14, chap. 72 and xv. 1. 14, chap. 690 ; Pliny, *Nat. Hist.* vi. 22 (24).
[d] *Cf.* Aristotle, *De Caelo*, 284 a 24-26 and 295 a 16-21 (on Empedocles [Cherniss, *Aristotle's Criticism of Presocratic Philosophy*, p. 204, n. 234]). Plutarch himself in *Lysander*, xii. 3-4 (439 D) ascribes to Anaxagoras the notion that the heavenly bodies are kept from falling by the speed of their circular motion.

(923) E διὰ θερμότητα καὶ πύρωσιν ἐλαφρᾶς γεγενημένης. ὅλως δ' ἔοικεν ἐξ ὧν λέγεις ἡ σελήνη μᾶλλον, εἰ πῦρ ἐστι, γῆς δεῖσθαι καὶ ὕλης ἐν ᾗ βέβηκε καὶ προσπέφυκε καὶ συνέχει καὶ ζωπυρεῖ τὴν δύναμιν· οὐ γὰρ ἔστι πῦρ χωρὶς ὕλης διανοηθῆναι σῳζόμενον γῆν δέ φατε ὑμεῖς ἄνευ βάσεως καὶ ῥίζης διαμένειν."[1] "πάνυ μὲν οὖν" εἶπεν ὁ Φαρνάκης "τὸν οἰκεῖον καὶ κατὰ φύσιν τόπον ἔχουσαν, ὅσπερ αὐτῇ,[2] τὸν μέσον. οὗτος γάρ ἐστι περὶ ὃν ἀντερείδει πάντα τὰ βάρη ῥέποντα καὶ φέρεται καὶ συννεύει F πανταχόθεν· ἡ δ' ἄνω χώρα πᾶσα, κἄν τι δέξηται γεῶδες ὑπὸ βίας ἀναρριφέν, εὐθὺς ἐκθλίβει δεῦρο μᾶλλον δ' ἀφίησιν ᾗ πέφυκεν οἰκείᾳ ῥοπῇ καταφερόμενον."

7. Πρὸς τοῦτ' ἐγὼ τῷ Λευκίῳ χρόνον ἐγγενέσθαι βουλόμενος ἀναμιμνῃσκομένῳ τὸν Θέωνα καλέσας

[1] Aldine, Basiliensis; E and B have a question-mark here.
[2] Von Arnim (*S.V.F.* ii, p. 195); ὥσπερ αὐτὴ -E, B.

[a] Here Lucius assumes the Stoic theory of the composition of the moon in order to rebut the Stoic objections.

[b] *Cf.* Seneca, *Nat. Quaest.* vii. 1. 7: ". . . magni fuere viri, qui sidera crediderunt ex duro concreta et ignem alienum pascentia. 'nam per se,' inquiunt, 'flamma diffugeret, nisi aliquid haberet, quod teneret et a quo teneretur, conglobatamque nec stabili inditam corpori, profecto iam mundus turbine suo dissipasset.'"

[c] *Cf.* Aristotle's remark (*Meteorology*, 353 a 34–b 5) about the ancient θεολόγοι who assumed ῥίζαι γῆς καὶ θαλάττης and see Hesiod, *Theogony*, 728; Aeschylus, *Prometheus Vinct.* 1046-1047; and the "Orphic" lines quoted by Proclus,

still more, inasmuch as the moon has, of course, become light through the action of heat and fire.[a] In short, your own statements seem to make the moon, if it is fire, stand in greater need of earth, that is of matter to serve it as a foundation, as something to which to adhere, as something to lend it coherence, and as something that can be ignited by it, for it is impossible to imagine fire being maintained without fuel,[b] but you people say that earth does abide without root or foundation." [c] "Certainly it does," said Pharnaces, "in occupying the proper and natural place that belongs to it, the middle, for this is the place about which all weights in their natural inclination press against one another and towards which they move and converge from every direction, whereas all the upper space, even if it receive something earthy which has been forcibly hurled up into it, straightway extrudes it into our region or rather lets it go where its proper inclination causes it naturally to descend." [d]

7. At this—for I wished Lucius to have time to collect his thoughts—I called to Theon. "Which of

In Timaeum, 211 c (ii, p. 231. 27-28 [Diehl]) = Kern, *Orphicorum Fragmenta*, 168. 29-30 (p. 202). The phrase ῥίζα καὶ βάσις is applied to the earth itself in a different sense by "Timaeus Locrus" (97 E). For the ascription to Xenophanes of the notion that the earth ἐπ' ἄπειρον ἐρρίζωται *cf.* Xenophanes, frag. A 47 (i, pp. 125-126 [Diels-Kranz]).

[d] = *S.V.F.* ii, p. 195, frag. 646. This is the doctrine of proper place and natural motion, originally Aristotelian and ascribed to Aristotle in *De Defectu Oraculorum*, 424 B but adopted also by the Stoics (*cf. S.V.F.* ii, p. 162. 14-19 ; p. 169. 8-11 : p. 175. 16-35 ; p. 178. 12-15) ; it should not be confused, however, as Raingeard confuses it, with the Stoic doctrine that the universe itself is in the middle of the void (*De Defectu Oraculorum*, 425 D-E, *De Stoicorum Repugnantiis*, 1054 C-D).

(923) "τίς" ἔφην "ὦ Θέων εἴρηκε τῶν τραγικῶν ὡς ἰατροὶ

πικρὰν πικροῖς κλύζουσι φαρμάκοις χολήν;"

ἀποκριναμένου δὲ τοῦ Θέωνος ὅτι Σοφοκλῆς, "καὶ δοτέον" εἶπον "ὑπ' ἀνάγκης ἐκείνοις. φιλοσόφων δ' οὐκ ἀκουστέον ἂν τὰ παράδοξα παραδόξοις ἀμύνεσθαι βούλωνται καὶ μαχόμενοι πρὸς τὰ θαυμάσια τῶν δογμάτων ἀτοπώτερα καὶ θαυμασιώτερα πλάτ-
924 τωσιν, ὥσπερ οὗτοι τὴν ἐπὶ τὸ μέσον φορὰν εἰσάγουσιν. ἢ τί παράδοξον οὐκ ἔνεστιν; οὐχὶ τὴν γῆν σφαῖραν εἶναι τηλικαῦτα βάθη καὶ ὕψη καὶ ἀνωμαλίας ἔχουσαν; οὐκ ἀντίποδας οἰκεῖν ὥσπερ θρῖπας[1] ἢ γαλεώτας τραπέντας[2] ἄνω τὰ κάτω τῇ γῇ προσισχομένους;[3] ἡμᾶς δ' αὐτοὺς μὴ πρὸς ὀρθὰς βεβηκότας ἀλλὰ πλαγίους ἐπιμένειν ἀπονεύοντας

[1] Dübner: θρίπας -E, B.
[2] Basiliensis: τραπέντα -E, B.
[3] -Anon., Aldine, R.J. 94 (implied by version of Xylander); προϊσχομένους -E, B.

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[a] Sophocles, frag. 770 (Nauck[2]). The verse is quoted with variations at *De Cohibenda Ira*, 463 F, and *De Tranquillitate Animi*, 468 B.

[b] *Cf.* Aristotle's remark, *De Caelo*, 294 a 20-21: τὸ δὲ τὰς περὶ τούτου λύσεις μὴ μᾶλλον ἀτόπους εἶναι δοκεῖν τῆς ἀπορίας, θαυμάσειεν ἄν τις.

[c] This objection to the Peripatetic and Stoic theory that the sphericity of the earth is a necessary consequence of the natural motion of earth "downwards" to the centre of the universe (Aristotle, *De Caelo*, 297 a 8–b 23; Strabo, i. 1. 20,

the tragic poets was it, Theon," I asked, "who said that physicians

With bitter drugs the bitter bile purge?"

Theon replied that it was Sophocles.[a] "Yes," I said, "and we have of necessity to allow them this procedure; but to philosophers one should not listen if they desire to repulse paradoxes with paradoxes and in struggling against opinions that are amazing fabricate others that are more amazing and outlandish,[b] as these people do in introducing their 'motion to the centre.' What paradox is not involved in this doctrine? Not the one that the earth is a sphere although it contains such great depths and heights and irregularities? [c] Not that people live on the opposite hemisphere clinging to the earth like wood-worms or geckos turned bottomside up? [d]—and that we ourselves in standing remain not at right angles to the earth but at an oblique angle, leaning from the perpendicular

chap. 11; Adrastus in Theon of Smyrna, p. 122. 1-16 [Hiller]) was often answered (*cf.* Dicaearchus in Pliny, *Nat. Hist.* ii. 65. 162; Adrastus in Theon of Smyrna, pp. 124. 7–127. 23, using arguments from Archimedes, Eratosthenes, and Dicaearchus: Cleomedes, i. 56 [p. 102. 9-20 Ziegler]; Alexander in Simplicius, *De Caelo*, p. 546. 15-23; Alexander, *De Mixtione*, p. 237. 5-15 [Bruns]). Plutarch, who defends Plato for constructing the spherical earth of molecules that are cubes on the ground that no material object can be a perfect sphere (*Quaest. Plat.* 1004 B-C), probably did not intend this or the subsequent paradoxes to be taken too seriously. Lamprias is simply riding Pharnaces as hard as he can, using any argument, good or bad, to make him appear ridiculous.

[d] *Cf.* Lucretius, i. 1052-1067 in his argument against the Stoic "motion to the centre." Plutarch mentions the antipodes in connection with the Stoics in *De Stoicorum Repugnantiis*, 1050 B. In *De Herodoti Malignitate*, 869 C it is said that "some" say that there are antipodes.

(924) ὥσπερ οἱ μεθύοντες; οὐ μύδρους χιλιοταλάντους διὰ βάθους τῆς γῆς φερομένους, ὅταν ἐξίκωνται πρὸς τὸ μέσον, ἵστασθαι μηδενὸς ἀπαντῶντος μηδ' ὑπερείδοντος εἰ δὲ ῥύμῃ κάτω φερόμενοι[1] τὸ μέσον
B ὑπερβάλλοιεν αὖθις ὀπίσω στρέφεσθαι καὶ ἀνακάμπτειν ἀφ' αὑτῶν;[2] οὐ τμήματα δοκῶν ἀποπρησθέντα[3] τῆς γῆς ἑκατέρωθεν μὴ φέρεσθαι κάτω διὰ παντὸς[4] ἀλλὰ προσπίπτοντα πρὸς τὴν γῆν ἔξωθεν εἴσω[5] διωθεῖσθαι καὶ ἀποκρύπτεσθαι περὶ τὸ μέσον; οὐ ῥεῦμα λάβρον ὕδατος κάτω φερόμενον, εἰ πρὸς τὸ μέσον ἔλθοι σημεῖον ὅπερ αὐτοὶ λέγουσιν ἀσώματον, ἵστασθαι περικρεμαννύμενον[6] ⟨ἢ⟩ κύκλῳ
C περιπολεῖν,[7] ἄπαυστον αἰώραν καὶ ἀκατάπαυστον αἰωρούμενον; οὐδὲ γὰρ ψευδῶς ἔνια τούτων βιάσαιτο ἄν τις αὑτὸν[8] εἰς τὸ δυνατὸν τῇ ἐπινοίᾳ

[1] Xylander : φερομένου -E, B.
[2] Bernardakis ; ἀπ' αὐτῶν -E, B.
[3] H. C. ; ἀποπρισθέντα -E, B.
[4] Bernardakis ; διαπαντός -E, B.
[5] Bernardakis (ἔσω -Wyttenbach, Emperius ; *cf.* Xylander's " pertrudi intro ") ; ἴσως -E, B.
[6] Emperius : περικεραννύμενον -E, B.
[7] Emperius : κύκλῳ περὶ πόλιν -E : κύκλῳ περὶ πόλλον -B.
[8] Wyttenbach : αὐτὸν -E, B.

[a] *Cf.* Aristotle, *De Caelo*, 296 b 18-21 and 297 b 17-21 : the courses of bodies falling to the earth form equal angles with the horizontal plane at the point of contact and are not parallel. So, Lamprias argues, men standing upright on the earth would not be parallel to one another but all in converging on the centre would deviate from the " absolute " perpendicular.

[b] Probably not aeroliths, as Raingeard supposes, but

like drunken men ? [a] Not that incandescent masses of forty tons [b] falling through the depth of the earth stop when they arrive at the centre, though nothing encounter or support them ; and, if in their downward motion the impetus should carry them past the centre, they swing back again and return of themselves ? Not that pieces of meteors burnt out on either side of the earth do not move downwards continually but falling upon the surface of the earth force their way into it from the outside and conceal themselves about the centre ? [c] Not that a turbulent stream of water, if in flowing downwards it should reach the middle point, which they themselves call incorporeal,[d] stops suspended ⟨or⟩ moves round about it, oscillating in an incessant and perpetual see-saw ? [e] Some of these a man could not even mistakenly force

incandescent boulders such as are thrown up by volcanoes ; for μύδροι in this sense *cf.* [Aristotle], *De Mundo*, 395 b 22-23 ; Strabo, vi. 2. 8, chap. 274 ; vi. 2. 10, chap. 275 ; xiii. 4. 11, chap. 628. For the falling of great boulders within the earth *cf.* Lucretius, vi. 536-550, and Seneca, *Nat. Quaest.* vi. 22. 2 ; but Plutarch probably had in mind a subterranean geography such as that of *Phaedo*, 111 D ff., of which the next sentence but one contains an explicit reminiscence.

[c] For the text and interpretation of this sentence *cf. Class. Phil.* xlvi (1951), pp. 139-140.

[d] *Cf.* 926 B *infra*. According to the Stoics the limits of bodies are incorporeal and therefore in the strict sense non-existent (*De Communibus Notitiis*, 1080 E ; *cf.* 1081 B and *S.V.F.* ii, p. 159, frag. 488), since only the corporeal exists (*S.V.F.* ii, p. 115, frag. 320 and p. 117, frag. 329). Only corporeal existence, moreover, can produce an effect or be affected (*De Communibus Notitiis*, 1073 E, *cf. S.V.F.* ii, p. 118, frag. 336 and p. 123, frag. 363). How then can the incorporeal centre have any effect upon corporeal entities ?

[e] *Cf.* Plato, *Phaedo*, 111 E—112 E, which is certainly the source of Plutarch's figure, and Aristotle's criticism of Plato's account in *Meteorology*, 355 b 32—356 a 19.

(924) καταστῆσαι. τοῦτο γάρ ἐστι τἄνω[1] κάτω καὶ[2] πάντα τραπέμπαλιν[3] εἶναι, τῶν ἄχρι τοῦ μέσου κάτω τῶν δ' ὑπὸ τὸ μέσον αὖ πάλιν ἄνω γιγνομένων. ὥστ', εἴ τις συμπαθείᾳ τῆς γῆς τὸ μέσον αὐτῆς ἔχων σταίη περὶ τὸν ὀμφαλόν, ἅμα καὶ τὴν κεφαλὴν ἄνω καὶ τοὺς πόδας ἄνω ἔχειν τὸν αὐτόν· κἂν μὲν[4] διασκάπτῃ τὸν ἐπέκεινα τόπον, ἀνακύπτον αὐτοῦ τὸ ⟨κάτω ἄνω⟩[5] εἶναι καὶ κάτω ἄνωθεν ἕλκεσθαι τὸν ἀνασκαπτόμενον· εἰ δὲ δὴ τούτῳ τις ἀντιβεβηκὼς νοοῖτο, τοὺς ἀμφοτέρων ἅμα πόδας ἄνω γίγνεσθαι καὶ λέγεσθαι.

8. Τοιούτων μέντοι καὶ τοσούτων παραδοξολο-
D γιῶν[6] οὐ μὰ Δία πήραν[7] ἀλλὰ θαυματοποιοῦ τινος ἀποσκευὴν καὶ πυλαίαν κατανωτισάμενοι καὶ παρέλκοντες ἑτέρους φασὶ γελοιάζειν[8] ἄνω τὴν σελήνην, γῆν οὖσαν, ἐνιδρύοντας[9] οὐχ ὅπου τὸ μέσον ἐστί. καίτοι γ' εἰ πᾶν σῶμα ἐμβριθὲς εἰς ταὐτὸ συννεύει

[1] Jackson, who would have reconstituted the words as an hexameter: τἄνω ⟨πάντα⟩ κάτω καὶ πάντα τραπέμπαλιν εἶναι (*cf.* Prickard's 1911 translation, p. 54): τὰ ἄνω -E, B.
[2] Wyttenbach; κἂν -E, B.
[3] Bernardakis (*cf.* Meineke, *Philologus*, xiv, p. 5 on 936 D *infra*); τραπέντα πάλιν -E, B.
[4] Leonicus; κἂν μὴ -E, B.
[5] H. C.; τὸ vac. 8-E, 7-B.
[6] E; παραδόξων λογιῶν -B.
[7] Turnebus; πεῖραν -E, B.
[8] Turnebus; πελάζειν -E, B.
[9] Kaltwasser; ἐνιδρύοντες -E, B.

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[a] *Cf. Phaedo*, 112 E 1-3. By introducing the conventional phrase ὑπὸ τὸ μέσον, which really begs the question, Lamprias makes the notion appear to be a ridiculous self-contradiction.
[b] That συμπαθείᾳ τῆς γῆς, which has given rise to many

himself to conceive as possible. For this amounts to ' upside down ' and ' all things topsy-turvy,' everything as far as the centre being ' down ' and everything under the centre in turn being ' up.' [a] The result is that, if a man should so coalesce with the earth [b] that its centre is at his navel, the same person at the same time has his head up and his feet up too. Moreover, if he dig through the further side, his ⟨bottom⟩ in emerging is ⟨up⟩, and the man digging himself ' up ' is pulling himself ' down ' from ' above ' [c]; and, if someone should then be imagined to have gone in the opposite direction to this man, the feet of both of them at the same time turn out to be ' up ' and are so called.

8. Nevertheless, though of tall tales of such a kind and number they have shouldered and lugged in—not a wallet-full, by heaven, but some juggler's pack and hotchpotch, still they say [d] that others are playing the buffoon by placing the moon, though it is earth, on high and not where the centre is. Yet if all heavy body converges to the same point and is

conjectures, need mean no more than this is proved by *Dox. Graeci*, p. 317 b 14-16 : τῆς τε τῶν ὄντων συμπαθείας καὶ τῆς τῶν σωμάτων ἀλληλουχίας. For the figure used here *cf.* Aristotle, *De Caelo*, 285 a 27–b 5, and Simplicius, *De Caelo*, p. 389. 8-24 and p. 391. 33 ff. The most famous later parallel is the position of Lucifer in Dante's *Inferno*, xxxiv. 76-120.

[c] *i.e.* his feet emerge first : and they, his bottom part, are " up." In digging himself " up " relatively to the surface through which he emerges, he is with reference to himself pulling himself not " up " to a position above his head but " down " to a position below his feet. The paradox rests upon the assumption that head and feet are respectively " absolute up " and " absolute down " for man (*cf.* Aristotle, *De Incessu Animal.* 705 a 26—706 b 16, and *Parva Nat.* 468 a 1-12).

[d] = *S.V.F.* ii, p. 195, frag. 646.

(924) καὶ πρὸς τὸ αὑτοῦ[1] μέσον ἀντερείδει πᾶσι τοῖς μορίοις, οὐχ ὡς μέσον οὖσα τοῦ παντὸς ἡ γῆ μᾶλλον ἢ ὡς ὅλον οἰκειώσεται μέρη αὑτῆς[2] ὄντα τὰ βάρη καὶ τεκμήριον ⟨τὸ κατωφερὲς⟩[3] ἔσται τῶν
E ῥεπόντων οὐ τῇ ⟨γῇ⟩[4] τῆς μεσότητος πρὸς τὸν κόσμον ἀλλὰ πρὸς τὴν γῆν κοινωνίας τινὸς καὶ συμφυΐας τοῖς ἀπωσμένοις αὐτῆς εἶτα πάλιν καταφερομένοις. ὡς γὰρ ὁ ἥλιος εἰς ἑαυτὸν ἐπιστρέφει τὰ μέρη ἐξ ὧν συνέστηκε, καὶ ἡ γῆ τὸν λίθον ὥσπερ ⟨αὑτῇ⟩[5] προσήκοντα δέχεται κατωφερῆ[6] πρὸς οἰκεῖον[7]· ὅθεν ἑνοῦται τῷ χρόνῳ καὶ συμ-

[1] Bernardakis (implied in versions of Xylander and Kepler) : αὐτοῦ -E, B.
[2] H. C. (implied in versions of Xylander and Kepler) ; αὐτῆς -E, B.
[3] H. C. (*cf.* *S.V.F.* ii, p. 175. 34) : τεκμήριον vac. 12-E, 14-B.
[4] Von Arnim ; γῇ in place of τῆς of E, B -Madvig.
[5] H. C. ; ὥσπερ vac. 4-E, 8-B (at end of line).
[6] Wyttenbach ; καὶ φέρει -E, B.
[7] H. C. (πρὸς τὸ οἰκεῖον -Emperius), *cf.* οἰκείᾳ ῥοπῇ καταφερόμενον (923 F *supra*) ; πρὸς ἐκεῖνον -E, B.

[a] Lamprias refers directly to the words of Pharnaces at 923 E-F *supra*. *Cf. De Stoicorum Repugnantiis*, 1055 A : εἰ γὰρ αὐτός γε νεύειν ἐπὶ τὸ αὑτοῦ μέσον ἀεὶ πέφυκε καὶ τὰ μέρη πρὸς τοῦτο κατατείνειν πανταχόθεν. . . .

[b] That τῶν ῥεπόντων can stand alone in this sense, *pace* Adler (*Diss. Phil. Vind.* x, p. 96), is proved by Aristotle, *De Caelo*, 312 b 24.

[c] Aristotle (*De Caelo*, 296 b 9-25) asserted that heavy, *i.e.* earthy, objects move to the centre of the universe and so only "accidentally" to the centre of the earth. The Stoics distinguished the cosmos as ὅλον from τὸ πᾶν, which is the cosmos plus the infinite void encompassing it (*S.V.F.* ii, p. 167, frags. 522-524), putting the cosmos in the centre of the πᾶν and explaining this as the result of the motion of *all* things to the centre of the latter (*S.V.F.* ii, pp. 174-175, frags. 552-554 ; *cf.* note *d* on 923 F *supra*) but stating that

compressed in all its parts upon its own centre,[a] it is no more as centre of the sum of things than as a whole that the earth would appropriate to herself the heavy bodies that are parts of herself; and ⟨the downward tendency⟩ of falling bodies [b] proves not that the ⟨earth⟩ is in the centre of the cosmos but that those bodies which when thrust away from the earth fall back to her again have some affinity and cohesion with her.[c] For as the sun attracts to itself the parts of which it consists [d] so the earth too accepts as ⟨her⟩ own the stone [e] that has properly a downward tendency, and consequently every such thing

within the cosmos those things that have weight, *i.e.* water and earth, move naturally down, *i.e.* to the centre (*S.V.F.* ii, p. 175. 16-35, frag. 555). Nevertheless, Chrysippus's own words could be used to show that the natural motion to the centre must belong to the parts of the universe *qua* parts of the whole and not because of their own nature (*cf.* *De Stoicorum Repugnantiis*, 1054 E—1055 C); and with the very word *οἰκειώσεται* Lamprias turns against the Stoics their own doctrine of *οἰκείωσις* (*cf.* *De Stoicorum Repugnantiis*, 1038 B = *S.V.F.* ii, p. 43, frag. 179).

[d] According to Reinhardt (*Kosmos und Sympathie*, pp. 173-177) the source of Plutarch's argument must be Posidonius; but none of the passages cited contains any parallel to this statement concerning the sun, for references to the attractive power of the sun over the other planets (Reinhardt, *op. cit.* p. 58, n. 2; *cf.* R. M. Jones, *Class. Phil.* xxvii [1932], pp. 122 ff.) are irrelevant. There may rather have been a connection between this notion and the doctrine of Cleanthes referred to in *De Communibus Notitiis*, 1075 D = *S.V.F.* i, p. 114, frag. 510.

[e] This is not a reference to aeroliths as Raingeard and Kronenberg suppose nor to the imaginary stone in intercosmic space (*De Defectu Oraculorum*, 425 C) as Adler believes, but to any *γεῶδές τι ὑπὸ βίας ἀναρριφέν*, in the words of Pharnaces (923 F *supra*); *cf.* Aristotle's use of *ὁ λίθος* in the statement of his principle of natural motion (*Eth. Nic.* 1103 a 19-22).

(924) φύεται πρὸς αὐτὴν τῶν τοιούτων ἕκαστον. εἰ δέ τι τυγχάνει σῶμα τῇ γῇ μὴ προσνενεμημένον ἀπ' ἀρχῆς[1] μηδ' ἀπεσπασμένον ἀλλά που[2] καθ' αὑτὸ
F σύστασιν ἔσχεν ἰδίαν καὶ φύσιν ὡς φαῖεν ἂν ἐκεῖνοι τὴν σελήνην, τί κωλύει χωρὶς εἶναι καὶ μένειν περὶ αὑτὸ[3] τοῖς αὑτοῦ[4] πεπιεσμένον μέρεσι καὶ συμπεπεδημένον; οὔτε γὰρ ἡ γῆ μέσον οὖσα δείκνυται τοῦ παντὸς ἥ τε πρὸς τὴν γῆν τῶν ἐνταῦθα συνέρεισις[5] καὶ σύστασις ὑφηγεῖται τὸν τρόπον ᾧ μένειν τὰ ἐκεῖ συμπεσόντα πρὸς τὴν σελήνην εἰκός ἐστιν. ὁ δὲ πάντα τὰ γεώδη καὶ βαρέα συνελαύνων εἰς μίαν χώραν καὶ μέρη ποιῶν ἑνὸς σώματος, οὐχ ὁρῶ διὰ τί τοῖς κούφοις τὴν αὐτὴν ἀνάγκην οὐκ ἀνταποδίδωσιν ἀλλ' ἐᾷ χωρὶς εἶναι συστάσεις πυρὸς τοσαύτας καὶ οὐ πάντας εἰς ταὐτὸ[6] συνάγων τοὺς ἀστέρας σαφῶς[7] οἴεται δεῖν καὶ σῶμα κοινὸν εἶναι τῶν ἀνωφερῶν[8] καὶ φλογοειδῶν ἁπάντων.

925 9. 'Αλλ' ἥλιον μὲν ἀπλέτους μυριάδας ἀπέχειν τῆς ἄνω περιφορᾶς φατε" εἶπον "ὦ φίλε 'Απολλω-

[1] Aldine, Basiliensis ; ἀπαρχῆς -E, B.
[2] Stephanus (1624) : τοῦ -E, B.
[3] Wyttenbach (implied in Kepler's version) ; αὐτὸ -E, B.
[4] Wyttenbach (implied in versions of Xylander, Amyot, and Kepler) ; αὐτοῦ -E, B.
[5] Wyttenbach ; συναίρεσις -E, B.
[6] Wyttenbach (implied in versions of Amyot and Kepler) ; τοῦτο -E, B.
[7] E, B ; καὶ φῶς -Adler after Wyttenbach ; πάντας . . . σαφῶς deleted as marginal note by Sandbach (*Cambridge Philological Society*, 1943).
[8] Turnebus, Xylander ; ἀναφορῶν -E, B.

[a] The men referred to in 924 D, ἑτέρους . . . ἄνω τὴν σελήνην, γῆν οὖσαν, ἐνιδρύοντας, whom the Stoics attack and among

ultimately unites and coheres with her. If there is a body, however, that was not originally allotted to the earth or detached from it but has somewhere independently a constitution and nature of its own, as those men [a] would say of the moon, what is to hinder it from being permanently separate in its own place, compressed and bound together by its own parts? For it has not been proved that the earth is the centre of the sum of things,[b] and the way in which things in our region press together and concentrate upon the earth suggests how in all probability things in that region converge upon the moon and remain there. The man who drives together into a single region all earthy and heavy things and makes them part of a single body—I do not see for what reason he does not apply the same compulsion to light objects in their turn but allows so many separate concentrations of fire and, since he does not collect all the stars together, clearly does not think that there must also be a body common to all things that are fiery and have an upward tendency.

9. Now," said I, "my dear Apollonides, you mathematicians [c] say that the sun is an immense distance from the upper circumference and that above

whom are Lamprias and Lucius themselves and "our comrade" (921 F).

[b] *i.e.* even if it is the centre of our cosmos; *cf. De Defectu Oraculorum*, 425 A-E, where concerning the possibility of a multiplicity of universes in τὸ πᾶν Plutarch points out that even on the hypothesis of natural motion and proper place up, down, and centre would apply separately within each cosmos, there could be no centre of τὸ πᾶν, and the laws of motion in any one universe could not affect objects in any other or hypothetical objects in intercosmic space.

[c] This is implied by the second person plural addressed to Apollonides, *cf.* 925 B *infra* and 920 F, 921 C *supra*.

(925) νίδη καὶ Φωσφόρον ἐπ' αὐτῷ καὶ Στίλβοντα[1] καὶ τοὺς ἄλλους πλάνητας ὑφιεμένους τε τῶν ἀπλανῶν καὶ πρὸς ἀλλήλους ἐν διαστάσεσι μεγάλαις φέρεσθαι τοῖς δὲ βαρέσι[2] καὶ γεώδεσιν οὐδεμίαν οἴεσθε τὸν κόσμον εὐρυχωρίαν παρέχειν ἐν ἑαυτῷ καὶ διάστασιν. ὁρᾶτε ὅτι γελοῖόν ἐστιν εἰ γῆν οὐ φήσομεν εἶναι τὴν σελήνην ὅτι τῆς κάτω χώρας ἀφέστηκεν
B ἄστρον δὲ φήσομεν ὁρῶντες ἀπωσμένην τῆς ἄνω περιφορᾶς μυριάσι σταδίων τοσαύταις ὥσπερ ⟨εἰς⟩[3] βυθόν τινα καταδεδυκυῖαν. τῶν μέν γ' ἄστρων κατωτέρω τοσοῦτόν ἐστιν ὅσον οὐκ ἄν τις εἴποι μέτρον[4] ἀλλ' ἐπιλείπουσιν ὑμᾶς[5] τοὺς μαθηματικοὺς ἐκλογιζομένους οἱ ἀριθμοί, τῆς δὲ γῆς τρόπον τινὰ ψαύει καὶ περιφερομένη πλησίον

ἅρματος ὡς πέρι χνοίη ἑλίσσεται[6]

φησὶν Ἐμπεδοκλῆς

ἥ τε παρ' ἄκρην
⟨νύσσαν ἐλαυνομένη⟩.[7]

οὐδὲ γὰρ τὴν σκιὰν αὐτῆς ὑπερβάλλει πολλάκις ἐπὶ μικρὸν αἰρομένην[8] τῷ παμμέγεθες εἶναι τὸ φωτίζον ἀλλ' οὕτως ἔοικεν ἐν χρῷ καὶ σχεδὸν ἐν ἀγκάλαις τῆς γῆς περιπολεῖν ὥστ' ἀντιφράττεσθαι πρὸς τὸν
C ἥλιον ὑπ' αὐτῆς μὴ ὑπεραίρουσα τὸν σκιερὸν καὶ χθόνιον καὶ νυκτερινὸν[9] τοῦτον τόπον ὃς γῆς κλῆρός

[1] E, B; for the form see note on 941 c *infra*.
[2] Basiliensis; βαθέσι -E, B.
[3] Wyttenbach (implied in versions of Xylander and Amyot), *cf.* 943 D: εἰς βυθὸν . . . καταδυομένας.
[4] E, B²; ὅσῳ . . . μέτρῳ -B¹. [5] Xylander; ἡμᾶς -E, B.
[6] Panzerbieter; ἅρματος ὥσπερ ἴχνος ἀνελίσσεται -E, B.
[7] Diels; ἦτε περὶ ἄκραν vac. 18-E, 26-B.

the sun Venus and Mercury and the other planets [a] revolve lower than the fixed stars and at great intervals from one another ; but you think that in the cosmos there is provided no scope and extension for heavy and earthy objects. You see that it is ridiculous for us to deny that the moon is earth because she stands apart from the nether region and yet to call her a star although we see her removed so many thousands of miles from the upper circumference as if plunged ⟨into⟩ a pit. So far beneath the stars is she that the distance cannot be expressed, but you mathematicians in trying to calculate it run short of numbers ; she practically grazes the earth and revolving close to it

Whirls like a chariot's axle-box about,

Empedocles says,[b]

That skims ⟨the post in passing⟩.

Frequently she does not even surmount the earth's hadow, though it extends but a little way because the illuminating body is very large ; but she seems to revolve so close, almost within arm's reach of the earth, as to be screened by it from the sun unless she rises above this shadowy, terrestrial, and nocturnal place which is earth's estate. Therefore we must

[a] For the order of the planets *cf.* Dreyer, *History of the Planetary Systems*, pp. 168-170, and Boyancé, *Études sur le Songe de Scipion*, pp. 59-65 ; the order here given is not the one adopted by most of the astronomers of Plutarch's time, by the later Stoics, or in all probability by Posidonius.
[b] Empedocles, frag. B 46 (i, p. 331 [Diels-Kranz]).

[8] -Anon., Aldine, R.J. 94, and implied in versions of Amyot and Kepler ; αἰρομένη -E, B.
[9] νυκτερίνον -B ; νυκτέριον -E.

(925) ἐστι. διὸ λεκτέον οἶμαι θαρροῦντας ἐν τοῖς ⟨τῆς⟩[1] γῆς ὅροις εἶναι τὴν σελήνην ὑπὸ τῶν ἄκρων αὐτῆς ἐπιπροσθουμένην.

10. Σκόπει δὲ τοὺς ἄλλους ἀφεὶς ἀπλανεῖς καὶ πλάνητας ἃ δείκνυσιν Ἀρίσταρχος ἐν τῷ Περὶ μεγεθῶν καὶ ἀποστημάτων ὅτι ' τὸ τοῦ ἡλίου ἀπόστημα τοῦ ἀποστήματος τῆς σελήνης ' ὃ ἀφέστηκεν
D ἡμῶν ' πλέον μὲν ἢ ὀκτωκαιδεκαπλάσιον ἔλαττον δ' ἢ εἰκοσαπλάσιόν ἐστι.' καίτοι ὁ τὴν σελήνην ἐπὶ μήκιστον αἴρων ἀπέχειν[2] φησὶν ἡμῶν ἓξ καὶ πεντηκονταπλάσιον τῆς ἐκ τοῦ κέντρου τῆς γῆς. αὕτη[3] δ' ἐστὶ τεσσάρων μυριάδων καὶ κατὰ τοὺς μέσως ἀναμετροῦντας, καὶ ἀπὸ ταύτης συλλογιζομένοις ἀπέχει ὁ ἥλιος τῆς σελήνης πλέον ἢ τετρακισχιλίας τριάκοντα μυριάδας. οὕτως ἀπῴκισται τοῦ ἡλίου διὰ βάρος καὶ τοσοῦτο τῇ γῇ προσκεχώρηκεν ὥστε, εἰ τοῖς τόποις τὰς οὐσίας διαιρετέον, ἡ γῆς μοῖρα καὶ χώρα[4] προσκαλεῖται σελήνην καὶ τοῖς περὶ γῆν
E πράγμασι καὶ σώμασιν ἐπίδικός ἐστι κατ' ἀγχιστείαν καὶ γειτνίασιν. καὶ οὐδέν, οἶμαι, πλημμελοῦμεν ὅτι τοῖς ἄνω προσαγορευομένοις βάθος τοσοῦτο καὶ διάστημα διδόντες ἀπολείπομέν τινα

[1] Aldine, Basiliensis : ἐν τοῖς (η) γῆς -E : ἐν τοῖς γῆς -B.
[2] B ; ἀπέχει -E.
[3] B ; αὐτὴ -E.
[4] Turnebus (*cf.* 925 c : τόπον ὃς γῆς κλῆρος) : ὥρα -E, B.

[a] This is Proposition 7 of Aristarchus's treatise, the full title of which is *On the Sizes and Distances of the Sun and Moon*. The treatise is edited and translated by Sir Thomas Heath in his *Aristarchus of Samos*, pp. 352 ff.

[b] This was not the highest estimate hitherto given, nor have I been able to identify its author. *Cf.* on this matter and the subsequent calculations in this passage *Class. Phil.* xlvi

boldly declare, I think, that the moon is within the confines of ⟨the⟩ earth inasmuch as she is occulted by its extremities.

10. Dismiss the fixed stars and the other planets and consider the demonstrations of Aristarchus in his treatise, *On Sizes and Distances*, that ' the distance of the sun is more than 18 times and less than 20 times the distance of the moon,' that is its distance from us.[a] According to the highest estimate, however, the moon's distance from us is said to be 56 times the radius of the earth.[b] Even according to the mean calculations this radius is 40,000 stades; and, if we reckon from this, the sun is more than 40,300,000 stades distant from the moon. She has migrated so far from the sun on account of her weight and has moved so close to the earth that, if properties [c] are to be determined by locations, the lot, I mean the position, of earth lays an action against the moon and she is legally assignable by right of propinquity and kinship to the chattels real and personal of earth. We do not err at all, I think, if granting such altitude and extension to the things called ' upper ' we leave what is ' down below ' also

(1951), pp. 140-141. No attempt is made to give equivalents for stades in calculations, for it is uncertain what stade is meant in any one place. Schiaparelli assumes everywhere the Olympic stade of 185 metres (*Scritti sulla storia della astronomia antica*, i, p. 333, n. 3 and p. 342, n. 1); Heath argues that Eratosthenes used a stade of 157.5 metres and Ptolemy the royal stade of 210 metres (*Aristarchus of Samos*, pp. 339 and 346); and Raingeard (p. 83 on 925 D 6) assumes without argument that Plutarch used the Attic stade of 177.6 metres.

[c] There is a play on the meaning of τὰς οὐσίας, " substances," as " property " or " estates " and as " the real nature of things."

(925) καὶ τῷ κάτω περιδρομὴν καὶ πλάτος ὅσον ἐστὶν ἀπὸ γῆς ἐπὶ σελήνην· οὔτε γὰρ ὁ τὴν ἄκραν ἐπιφάνειαν τοῦ οὐρανοῦ μόνην ἄνω τἆλλα δὲ κάτω προσαγορεύων ἅπαντα μέτριός ἐστιν οὔθ' ὁ τῇ γῇ μᾶλλον δ' ὁ τῷ κέντρῳ τὸ κάτω περιγράφων ἀνεκτός, ἀλλὰ κἀκείνῃ τι καὶ[1] ταύτῃ διάστημα δοτέον[2] ἐπιχωροῦντος τοῦ κόσμου διὰ μέγεθος. πρὸς δὲ τὸν ἀξιοῦντα πᾶν εὐθὺς ἄνω καὶ μετέωρον εἶναι τὸ ἀπὸ τῆς γῆς ἕτερος ἀντηχεῖ πάλιν εὐθὺς
F εἶναι κάτω τὸ ἀπὸ τῆς ἀπλανοῦς περιφορᾶς.

11. Ὅλως δὲ πῶς λέγεται καὶ τίνος ἡ γῆ μέση κεῖσθαι;[3] τὸ γὰρ πᾶν ἄπειρόν ἐστι, τῷ δ' ἀπείρῳ μήτ' ἀρχὴν ἔχοντι μήτε πέρας οὐ προσήκει μέσον ἔχειν· πέρας γάρ τι καὶ τὸ μέσον, ἡ δ' ἀπειρία περάτων στέρησις. ὁ δὲ μὴ τοῦ παντὸς ἀλλὰ τοῦ κόσμου μέσην εἶναι τὴν γῆν ἀποφαινόμενος ἡδύς ἐστιν εἰ μὴ καὶ τὸν κόσμον αὐτὸν ἐνέχεσθαι ταῖς αὐταῖς ἀπορίαις νομίζει· τὸ γὰρ πᾶν οὐδὲ τούτῳ[4] μέσον[5] ἀπέλιπεν, ἀλλ' ἀνέστιος καὶ ἀνίδρυτός ἐστιν
926 ἐν ἀπείρῳ κενῷ φερόμενος πρὸς οὐδὲν οἰκεῖον ⟨ἤ⟩, εἰ[6] ἄλλην τινὰ τοῦ μένειν εὑράμενος αἰτίαν[7] ἕστηκεν οὐ κατὰ τὴν τοῦ τόπου φύσιν, ὅμοια καὶ περὶ γῆς καὶ περὶ σελήνης εἰκάζειν τινὶ πάρεστιν ὡς ἑτέρᾳ

[1] Bernardakis after Madvig's καὶ ἐκείνῃ καὶ ; καὶ κινητικο vac. 2-E, B.
[2] Madvig ; τὸ δέον -E, B.
[3] Wyttenbach ; κεῖται -E, B.
[4] Stephanus (1624) ; τοῦτο -E, B.
[5] Turnebus ; μέσην -E, B.
[6] Implied by versions of Xylander and Kepler ; εἰ ἄλλην -E, B ; ἢ ἄλλην -Turnebus.
[7] E ; αἰτίαν εὑράμενος -B.

[a] *Cf. De Defectu Oraculorum*, 424 D, where καθ' οὓς δ'

some room to move about in and so much latitude as there is from earth to moon. For as he is immoderate who calls only the outermost surface of the heaven ' up ' and all else ' down,' so is he intolerable who restricts ' down ' to the earth or rather to the centre ; but both there and here some extension must be granted since the magnitude of the universe permits it. The claim that everything away from the earth is *ipso facto* ' up ' and ' on high ' is answered by a counter-claim that what is away from the circuit of the fixed stars is *ipso facto* ' down.'

11. After all, in what sense is earth situated in the middle and in the middle of what ? The sum of things is infinite ; and the infinite, having neither beginning nor limit, cannot properly have a middle, for the middle is a kind of limit too but infinity is a negation of limits. He who asserts that the earth is in the middle not of the sum of things but of the cosmos is naïve if he supposes that the cosmos itself is not also involved in the very same difficulties.[a] In fact, in the sum of things no middle has been left for the cosmos either, but it is without hearth and habitation,[b] moving in infinite void to nothing of its own ; ⟨or⟩, if it has come to rest because it has found some other reason for abiding, not because of the nature of its location,[c] similar inferences are permissible in the cases of both earth and moon, that the former is stationary

ἔστιν (*scil.* τὸ κενόν) refers to the Stoics (for whose distinction between the πᾶν and the κόσμος see note *c* on 924 E *supra*), and *De Stoicorum Repugnantiis*, 1054 B-D, where as here Plutarch uses against the Stoics a weapon taken from their own arsenal.

[b] *Cf. Gracchi*, ix. 5. 828 D : ἄοικοι καὶ ἀνίδρυτοι.

[c] *Cf. S.V.F.* ii, pp. 174-175, frags. 552 and 553 ; *De Stoicorum Repugnantiis*, 1054 F—1055 B.

(926) *τινὶ ψυχῇ καὶ φύσει μᾶλλον ⟨ἢ τοπικῇ⟩ διαφορᾷ*[1] *τῆς μὲν ἀτρεμούσης ἐνταῦθα τῆς δ' ἐκεῖ*[2] *φερομένης. ἄνευ δὲ τούτων ὅρα μὴ μέγα τι λέληθεν αὐτούς· εἰ γὰρ ὅτι ἂν καὶ ὁπωσοῦν*[3] *ἐκτὸς γένηται τοῦ κέντρου τῆς γῆς ἄνω ἐστίν, οὐδέν ἐστι τοῦ κόσμου κάτω μέρος ἀλλ' ἄνω καὶ ἡ γῆ καὶ τὰ ἐπὶ γῆς καὶ*
B *πᾶν ἁπλῶς σῶμα τῷ*[4] *κέντρῳ περιεστηκὸς ἢ περικείμενον ἄνω γίγνεται κάτω δὲ μόνον [ὂν]*[5] *ἕν, τὸ ἀσώματον σημεῖον ἐκεῖνο ὃ πρὸς πᾶσαν ἀντικεῖσθαι τὴν τοῦ κόσμου φύσιν ἀναγκαῖον εἴ γε δὴ τὸ κάτω πρὸς τὸ ἄνω κατὰ φύσιν ἀντίκειται. καὶ οὐ τοῦτο μόνον τὸ ἄτοπον, ἀλλὰ καὶ τὴν αἰτίαν ἀπόλλυσι τὰ βάρη δι' ἣν δεῦρο καταρρέπει καὶ φέρεται· σῶμα μὲν γὰρ οὐδέν ἐστι κάτω πρὸς ὃ κινεῖται, τὸ δ' ἀσώματον οὔτ' εἰκὸς οὔτε βούλονται τοσαύτην ἔχειν δύναμιν ὥστε πάντα κατατείνειν ἐφ' ἑαυτὸ καὶ περὶ αὑτὸ*[6] *συνέχειν. ἀλλ' ὅλως*[7] *ἄλογον εὑρίσκεται καὶ μαχόμενον τοῖς πράγμασι τὸ ἄνω τὸν κόσμον ὅλον εἶναι τὸ δὲ κάτω μηδὲν ἀλλ' ἢ πέρας ἀσώματον καὶ ἀδιάστατον· ἐκεῖνο δ' εὔλογον, ὡς λέγομεν ἡμεῖς, τῷ τ' ἄνω χώραν καὶ τῷ κάτω πολλὴν καὶ πλάτος ἔχουσαν διῃρῆσθαι.*

C 12. Οὐ *μὴν ἀλλὰ θέντες, εἰ βούλει, παρὰ φύσιν*

[1] H.C. after Wyttenbach's *μᾶλλον ἢ φυσικῇ καὶ τοπικῇ διαφορᾷ* and Bernardakis's *μᾶλλον ⟨ἢ τόπου⟩ διαφορᾷ* (*cf. De Defectu Oraculorum*, 424 E: *οὐ τοπικῶς ἀλλὰ σωματικῶς* and *De Stoicorum Repugnantiis*, 1054 E: *φύσει . . . οὐ τῆς οὐσίας . . . ἀλλὰ τῆς . . . χώρας*); *μᾶλλον* vac. 7-E, 9-B *διαφοραὶ* -E, B.

[2] Madvig; *δὲ καὶ* -E, B.

[3] Dübner; *ὁπωσοῦν καὶ ὅτι ἂν* -E, B.

[4] Bernardakis (?); *τὸ* -E, B.

[5] Deleted by Madvig.

[6] E; *περὶ αὐτὸ* -B.

[7] Emperius; *ὅμως* -E, B.

here and the latter is in motion there by reason of a different soul or nature rather ⟨than⟩ a difference ⟨of location⟩. Besides this, consider whether they [a] have not overlooked an important point. If anything in any way at all off the centre of the earth is 'up,' no part of the cosmos is 'down'; but it turns out that the earth and the things on the earth and absolutely all body surrounding or enclosing the centre are 'up' and only one thing is 'down,' that incorporeal point [b] which must be in opposition to the entire nature of the cosmos, if in fact 'down' and 'up' are natural opposites.[c] This, moreover, does not exhaust the absurdity. The cause of the descent of heavy objects and of their motion to this region is also abolished, for there is no body that is 'down' towards which they are in motion and it is neither likely nor in accordance with the intention of these men that the incorporeal should have so much influence as to attract all these objects and keep them together around itself.[d] On the contrary, it proves to be entirely unreasonable and inconsistent with the facts for the whole cosmos to be 'up' and nothing but an incorporeal and unextended limit to be 'down'; but that statement of ours is reasonable, that ample space and broad has been divided between 'up' and 'down.'

12. All the same, let us assume, if you please, that

[a] The Stoics.

[b] *Cf. S.V.F.* ii, p. 169. 9-11, frag. 527: . . . *τῆς γῆς περὶ τὸ μέσον σημεῖον τοῦ κόσμου κειμένης, ὃ δὴ τοῦ παντός ἐστι κάτω, ἄνω δὲ τὸ ἀπ' αὐτοῦ εἰς τὸ κύκλῳ πάντῃ.*

[c] *Cf. S.V.F.* ii, p. 176, frag. 556: *τὸ ἄνω καὶ τὸ κάτω οὐ κατὰ σχέσιν . . . φύσει γὰρ διάφορα ταῦτα.*

[d] See note *d* on 924 B *supra*, and *cf. De Defectu Oraculorum*, 424 E against Aristotle.

(926) ἐν οὐρανῷ τοῖς γεώδεσι τὰς κινήσεις ὑπάρχειν ἀτρέμα, μὴ τραγικῶς, ἀλλὰ πράως σκοπῶμεν ὅτι τοῦτο τὴν σελήνην οὐ δείκνυσι γῆν μὴ οὖσαν ἀλλὰ γῆν ὅπου μὴ πέφυκεν οὖσαν, ἐπεὶ καὶ τὸ πῦρ τὸ Αἰτναῖον ὑπὸ γῆν παρὰ φύσιν ἐστὶν ἀλλὰ πῦρ ἐστι καὶ τὸ πνεῦμα τοῖς ἀσκοῖς περιληφθέν ἐστι μὲν ἀνωφερὲς φύσει καὶ κοῦφον ἥκει δ' ὅπου μὴ πέφυκεν ὑπ' ἀνάγκης. αὐτὴ δ' ἡ ψυχή, πρὸς Διὸς" εἶπον[1] "οὐ παρὰ φύσιν τῷ σώματι συνεῖρκται βραδεῖ ταχεῖα καὶ ψυχρῷ πυρώδης, ὥσπερ ὑμεῖς φατε, καὶ ἀόρατος αἰσθητῷ; διὰ τοῦτ' οὖν σώματι ψυχὴν μὴ λέγωμεν[2] ⟨ἐν⟩εῖναι[3] μηδὲ νοῦν,[4] χρῆμα θεῖον,
D [ὑπὸ βρίθους ἢ πάχους],[5] οὐρανόν τε πάντα καὶ γῆν καὶ θάλασσαν ἐν ταὐτῷ περιπολοῦντα καὶ διιπτάμενον,[6] εἰς σάρκας ἥκειν καὶ νεῦρα καὶ μυελοὺς ⟨ὑπὸ βρίθους καὶ πάχους⟩[7] καὶ παθέων μυρίων μετὰ ὑγρότητος; ὁ δὲ Ζεὺς ὑμῖν[8] οὗτος οὐ τῇ μὲν αὐτοῦ[9] φύσει χρώμενος ἕν ἐστι[10] μέγα πῦρ καὶ συνεχές, νυνὶ δ'[11] ὑφεῖται καὶ κέκαμπται καὶ διεσχημάτισται, πᾶν χρῆμα[12] γεγονὼς καὶ γιγνόμενος ἐν ταῖς μεταβολαῖς;

[1] E ; εἶπεν -B.
[2] E ; λέγομεν -B.
[3] Van Herwerden ; εἶναι -E, B.
[4] Madvig ; μηδὲν οὐ -E, B.
[5] [ ] H. C. (see note 7 *infra*).
[6] Wyttenbach ; διϊστάμενον -E, B.
[7] I have transposed this phrase hither ; E and B have it between θεῖον and οὐρανόν above.
[8] Xylander ; ἡμῖν -E, B.
[9] E, B² ; αὐτοῦ -B¹.
[10] E ; ἔνεστι -B.
[11] νυνὶ δὲ -B ; νυνίδε -E.
[12] -Anon., Aldine, R.J. 94 ; χρῶμα -E, B.

[a] *Cf.* 928 B *infra*. Plutarch probably has in mind inflated

the motions of earthy objects in the heaven are contrary to nature; and then let us calmly observe without any histrionics and quite dispassionately that this indicates not that the moon is not earth but that she is earth in an 'unnatural' location. For the fire of Aetna too is below earth 'unnaturally,' but it is fire; and the air confined in skins,[a] though by nature it is light and has an upward tendency, has been constrained to occupy an 'unnatural' location. As to the soul herself," I said, "by Zeus, is her confinement in the body not contrary to nature, swift as she is and fiery, as you say,[b] and invisible in a sluggish, cold, and sensible vehicle? Shall we then on this account deny that there is soul ⟨in⟩ body or that mind, a divine thing, though it traverses instantaneously in its flight all heaven and earth and sea,[c] has passed into flesh and sinew and marrow under the influence of weight and density and countless qualities that attend liquefaction? [d] This Zeus of yours too, is it not true that, while in his own nature he is single, a great and continuous fire, at present he is slackened and subdued and transformed, having become and continuing to become everything in the course of

skins used for floats; *cf.* Aristotle, *Physics*, 217 a 2-3, 255 b 26, *De Caelo*, 311 b 9-13.

[b] *Cf. S.V.F.* ii, p. 217, frag. 773: οἱ μὲν γὰρ Στωϊκοὶ πνεῦμα λέγουσιν αὐτὴν ἔνθερμον καὶ διάπυρον.

[c] For this commonplace of the flight of the mind through the universe *cf.* R. M. Jones, *Class. Phil.* xxi (1926), pp. 97-113.

[d] This is a reference to the Stoic notion that the embodiment of soul was a process of condensation or liquefaction. *Cf. De Stoicorum Repugnantiis*, 1053 B-C (=*S.V.F.* ii, frag. 605) and for the qualities that would attend liquefaction *S.V.F.* ii, p. 155. 34: γῆς τε καὶ ὕδατος, παχυμερῶν καὶ βαρέων καὶ ἀτόνων ὄντων.

(926) ὥσθ' ὅρα καὶ σκόπει, δαιμόνιε, μὴ μεθιστὰς καὶ
E ἀπάγων ἕκαστον ὅπου πέφυκεν εἶναι διάλυσίν τινα κόσμου φιλοσοφῇς καὶ τὸ νεῖκος ἐπάγῃς τὸ Ἐμπεδοκλέους τοῖς πράγμασι μᾶλλον δὲ τοὺς παλαιοὺς κινῇς Τιτᾶνας ἐπὶ τὴν φύσιν καὶ Γίγαντας καὶ τὴν μυθικὴν ἐκείνην καὶ φοβερὰν ἀκοσμίαν καὶ πλημμέλειαν ἐπιδεῖν ποθῇς χωρὶς τὸ βαρὺ πᾶν καὶ χωρὶς ⟨θεὶς πᾶν⟩[1] τὸ κοῦφον.

ἔνθ' οὔτ' ἠελίοιο διείδεται[2] ἀγλαὸν εἶδος[3]
οὐδὲ μὲν οὐδ' αἴης λάσιον μένος[4] οὐδὲ θάλασσα

ὥς φησιν Ἐμπεδοκλῆς· οὐ γῆ θερμότητος μετεῖχεν,
F οὐχ ὕδωρ πνεύματος, οὐκ ἄνω τι[5] τῶν βαρέων, οὐ κάτω τι[6] τῶν κούφων, ἀλλ' ἄκρατοι καὶ ἄστοργοι

[1] H. C., combining ⟨πᾶν⟩ of Turnebus with Diels's insertion of θεὶς after ποθῇς above; χωρὶς vac. 7-E, 3-B.
[2] Simplicius (*In Arist. Physic. Comment.* p. 1183. 30 [Diels]): δεδίττεται -E, B.
[3] E, B: ὠκέα γυῖα -Simplicius, *loc. cit.* (*cf.* exegetical note).
[4] Bergk; γένος -E, B.
[5] Stephanus; τί -E, B.
[6] Stephanus; τί -E, B.

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[a] =*S.V.F.* ii, p. 308, frag. 1045. Zeus "in his own nature" is the state of the universe in the ecpyrosis, while "at present" he is the universe in the state of diacosmesis; *cf. De Placitis*, 881 F—882 A (=Aëtius, i. 7. 33=*S.V.F.* ii, frag. 1027), Diogenes Laertius, vii. 137 (=*S.V.F.* ii, frag. 526), *De Stoicorum Repugnantiis*, 1052 C (=*S.V.F.* ii, frags. 1068 and 604), *De Communibus Notitiis* 1075 A-C (=*S.V.F.* ii, frag. 1049), and *S.V.F.* ii, frags. 1052, 1053, and 1056.

[b] The Strife of Empedocles is connected with the mythical war of the Giants by Proclus, *In Platonis Parmenidem Comment.* p. 849, 13-15 (ed. Cousin, Paris, 1864)=p. 659 (ed. Stallbaum).

[c] Empedocles, frag. B 27 (i, pp. 323. 11–324. 4 [Diels-Kranz]), where the ὠκέα γυῖα given by Simplicius is adopted

his mutations?[a] So look out and reflect, good sir, lest in rearranging and removing each thing to its 'natural' location you contrive a dissolution of the cosmos and bring upon things the 'Strife' of Empedocles—or rather lest you arouse against nature the ancient Titans and Giants[b] and long to look upon that legendary and dreadful disorder and discord ⟨when you have separated⟩ all that is heavy and ⟨all⟩ that is light.

> The sun's bright aspect is not there descried,
> No, nor the shaggy might of earth, nor sea

as Empedocles says.[c] Earth had no part in heat, water no part in air; there was not anything heavy above or anything light below; but the principles of all things[d] were untempered and unamiable[e] and

instead of Plutarch's ἀγλαὸν εἶδος. Bignone, however, who prints the lines given by Plutarch as frag. 26 a and those given by Simplicius as frag. 27, is probably right in taking this to be one of the lines which were repeated with a different ending in two different parts of the poem (*Empedocle, studio critico*, pp. 220 ff., 421, 599 ff.). Certainly Plutarch represents his quotation as describing the period when Strife has completely separated the four roots, whereas Simplicius says that his comes from the description of the Sphere, when all were thoroughly intermingled.

[d] *i.e.* the four "roots," earth, air, fire, and water, for the separation of which by Strife *cf.* Empedocles, frags. B 17. 8-10 and B 26. 6-9 (i, p. 316. 2-4 and p. 323. 4-7 [Diels-Kranz]).

[e] From this Mullach manufactured for Empedocles the verse that he numbered 174 (*Frag. Phil. Graec.* i, p. 5). Stein took only ἄκρατοι καὶ ἄστοργοι to be a quotation. The word ἄστοργος appears nowhere in the fragments of Empedocles (though στοργή does in frag. B 109 [i, p. 351. 22, Diels-Kranz]), whereas Plutarch uses it several times in other connections (*Amatorius*, 750 F, *Quaest. Nat.* 917 D, *De Sollertia Animalium*, 970 B).

(926) καὶ μονάδες αἱ τῶν ὅλων ἀρχαὶ μὴ προσιέμεναι σύγκρισιν ἑτέρου πρὸς ἕτερον μηδὲ κοινωνίαν ἀλλὰ φεύγουσαι καὶ ἀποστρεφόμεναι καὶ φερόμεναι φορὰς ἰδίας καὶ αὐθάδεις οὕτως εἶχον ὡς ἔχει πᾶν οὗ θεὸς ἄπεστι κατὰ Πλάτωνα, τουτέστιν ὡς ἔχει τὰ σώματα νοῦ καὶ ψυχῆς ἀπολιπούσης, ἄχρι[1] οὗ τὸ ἱμερτὸν ἧκεν ἐπὶ τὴν φύσιν ἐκ προνοίας, φιλότητος
927 ἐγγενομένης καὶ Ἀφροδίτης καὶ Ἔρωτος ὡς Ἐμπεδοκλῆς λέγει καὶ Παρμενίδης καὶ Ἡσίοδος, ἵνα καὶ τόπους ἀμείψαντα καὶ δυνάμεις ἀπ' ἀλλήλων μεταλαβόντα καὶ τὰ μὲν κινήσεως τὰ δὲ μονῆς ἀνάγκαις ἐνδεθέντα καὶ καταβιασθέντα πρὸς τὸ βέλτιον ἐξ οὗ πέφυκεν ἐνδοῦναι καὶ μεταστῆναι ⟨τὰ σώματα⟩[2] ἁρμονίαν καὶ κοινωνίαν ἀπεργάσηται τοῦ παντός.

13. Εἰ μὲν γὰρ οὐδ' ἄλλο τι τῶν τοῦ κόσμου μερῶν παρὰ φύσιν ἔσχεν ἀλλ' ἕκαστον ᾗ πέφυκε κεῖται μηδεμιᾶς[3] μεθιδρύσεως μηδὲ μετακοσμήσεως δεόμενον μηδ' ἐν ἀρχῇ δεηθέν, ἀπορῶ τί τῆς προ-
B νοίας ἔργον ἐστὶν ἢ τίνος γέγονε ποιητὴς καὶ πατὴρ

[1] Bernardakis ; ἄχρις -E, B.
[2] H. C. : μεταστῆναι vac. 7-E, 9-B.
[3] E ; μὴ δὲ μιᾶς -B.

[a] *Cf.* Clara Millerd, *On the Interpretation of Empedocles*, p. 54, and Cherniss, *Aristotle's Criticism of Presocratic Philosophy*, p. 175, n. 130. Plutarch's circumstantial account of the motion of the four "roots" during the complete dominance of Strife is coloured by the passage of Plato to which he refers.

[b] *Timaeus*, 53 B ; *cf. De Defectu Oraculorum*, 430 D, and *De An. Proc. in Timaeo*, 1016 F.

[c] *Cf. Amatorius*, 756 D-F, where Empedocles, frag. B 17. 20-21 (i, p. 317. 1-2 [Diels-Kranz]), and Parmenides, frag.

solitary, not accepting combination or association with one another, but avoiding and shunning one another and moving with their own peculiar and arbitrary motions [a] they were in the state in which, according to Plato,[b] everything is from which God is absent, that is to say in which bodies are when mind or soul is wanting. So they were until desire came over nature providentially, for Affection arose or Aphrodite or Eros, as Empedocles says and Parmenides and Hesiod,[c] in order that by changing position and interchanging functions and by being constrained some to motion and some to rest and compelled to give way and shift from the 'natural' to the 'better' ⟨the bodies⟩ might produce a universal concord and community.

13. If not a single one of the parts of the cosmos ever got into an 'unnatural' condition but each one is 'naturally' situated, requiring no transposition or rearrangement and having required none in the beginning either, I cannot make out what use there is of providence [d] or of what Zeus, 'the master-

B 13 (i, p. 243. 16 [Diels-Kranz]) are quoted, and Hesiod, *Theogony*, 120 is referred to; and *cf.* Aristotle, *Metaphysics*, 984 b 23—985 a 10. With Plutarch's ἐκ προνοίας contrast Aristotle's criticism of Empedocles (*Metaphysics*, 1000 b 12-17) and *cf.* Empedocles, frags. B 17. 29 and B 30 (i, p. 317. 10 and p. 325. 10-12 [Diels-Kranz]). By ἐκ προνοίας here Plutarch prepares the way for his use in the next paragraph of the Stoic doctrine of providence against the Stoic doctrine of natural place.

[d] On the importance of providence in Stoic doctrine and its ubiquity in Stoic writings *cf. De Stoicorum Repugnantiis*, 1050 A-B (=*S.V.F.* ii, frag. 937), 1051 E (=*S.V.F.* ii, frag. 1115); *De Communibus Notitiis*, 1075 E (=*S.V.F.* ii, frag. 1126), 1077 D-E (=*S.V.F.* ii, frag. 1064); Cicero, *De Natura Deorum*, iii. 92 (=*S.V.F.* ii, frag. 1107); Diogenes Laertius, vii. 138-139 (=*S.V.F.* ii, frag. 634).

(927) δημιουργὸς ὁ Ζεὺς ὁ ἀριστοτέχνας. οὐ γάρ[1] ἐν στρατοπέδῳ τακτικῶν ὄφελος, εἴπερ εἰδείη τῶν στρατιωτῶν ἕκαστος ἀφ' ἑαυτοῦ τάξιν τε καὶ χώραν καὶ καιρὸν οὗ δεῖ λαβεῖν καὶ διαφυλάσσειν οὐδὲ κηπουρῶν οὐδ' οἰκοδόμων, εἰ πῇ μὲν αὐτὸ τὸ ὕδωρ ἀφ' αὑτοῦ[2] πέφυκεν ἐπιέναι[3] τοῖς δεομένοις καὶ κατάρδειν ἐπιρρέον πῇ δὲ πλίνθοι καὶ ξύλα καὶ λίθοι ταῖς κατὰ φύσιν χρώμενα ῥοπαῖς[4] καὶ νεύσεσιν ἐξ ἑαυτῶν καταλαμβάνειν τὴν προσήκουσαν ἁρμονίαν καὶ χώραν. εἰ δ' οὗτος μὲν ἄντικρυς ἀναιρεῖ
C τὴν πρόνοιαν ὁ λόγος τῷ θεῷ δ' ἡ τάξις τῶν ὄντων προσήκει καὶ ⟨τὸ⟩[5] διαιρεῖν, τί θαυμαστὸν οὕτως[6] τετάχθαι καὶ διηρμόσθαι τὴν φύσιν ὡς ἐνταῦθα μὲν πῦρ ἐκεῖ δ' ἄστρα καὶ πάλιν ἐνταῦθα μὲν γῆν[7] ἄνω δὲ σελήνην ἱδρῦσθαι, βεβαιοτέρῳ τοῦ κατὰ φύσιν τῷ κατὰ λόγον δεσμῷ περιληφθεῖσαν;[8] ὡς, εἴ γε πάντα δεῖ ταῖς κατὰ φύσιν ῥοπαῖς χρῆσθαι καὶ φέρεσθαι καθ' ὃ[9] πέφυκε, μήθ'[10] ἥλιος κυκλοφορείσθω μήτε Φωσφόρος μηδὲ τῶν ἄλλων ἀστέρων μηδείς· ἄνω γὰρ οὐ κύκλῳ τὰ κοῦφα καὶ πυροειδῆ

[1] B ; υ γὰρ -E.
[2] B ; ἀπ' αὐτοῦ -E.
[3] Emperius ; ἐπεῖναι -E, B (*cf.* the same mistake in *Pompey*, xxxii. 636 B).
[4] Turnebus (*cf. Adv. Coloten*, 1122 C : ῥοπῆς . . . καὶ νεύσεως) ; τροπαῖς -E, B.
[5] Dübner.
[6] E ; οὕτω -B.
[7] B ; ἐνταῦθα γῆν -E.
[8] Wyttenbach ; δεσμωτηρίῳ ληφθεῖσαν -E, B.
[9] Stephanus (1624) ; καθὸ -E, B.
[10] Bernardakis ; μηδ' -E, B.

craftsman '[a] is maker and father-creator.[b] In an army, certainly, tacticians are useless if each one of the soldiers should know of himself his post and position and the moment when he must take and keep them. Gardeners and builders are useless too if here water all of itself ' naturally ' moves to the things that require it and irrigates them with its stream, and there bricks and timbers and stones by following their ' natural ' inclinations and tendencies assume of themselves their appropriate position and arrangement. If, however, this notion eliminates providence forthwith and if the arrangement of existing things pertains to God and ⟨the⟩ distributing of them too,[c] what wonder is there that nature has been so marshalled and disposed that here in our region there is fire but the stars are yonder and again that earth is here but the moon is established on high, held fast by the bonds of reason which are firmer than the bonds of nature ?[d] For, if all things really must follow their ' natural ' inclinations and move with their ' natural ' motions, you must order the sun not to revolve and Venus too and every other star as well, for light and fiery bodies move ' naturally ' upwards

[a] Plutarch ascribes to Pindar this epithet of Zeus in *Quaest. Conviv.* 618 B, *De Sera Numinis Vindicta*, 550 A, *De Communibus Notitiis*, 1065 E, and in *Praecepta Gerendae Reipublicae*, 807 C uses it of the statesman ; *cf.* Pindar, frag. 48, Bowra = 57, Bergk and Schroeder = 66, Turyn.

[b] This terminology is more Platonic than Stoic : *cf. Quaest. Conviv.* 720 B-C, *De An. Proc. in Timaeo*, 1017 A ; *cf. Timaeus*, 28 C and contrast *S.V.F.* ii, frag. 323 a.

[c] *Cf.* Aristotle, *Metaphysics*, 1075 a 11-15, and Diogenes Laertius, vii. 137 (= *S.V.F.* ii, frag. 526) : (θεός) . . . δημιουργὸς ὢν τῆς διακοσμήσεως.

[d] Wyttenbach's correction is assured by *Timaeus*, 41 B 4-6, of which this is meant to be an echo.

(927) κινεῖσθαι πέφυκεν. εἰ δὲ τοιαύτην ἐξαλλαγὴν ἡ φύσις ἔχει παρὰ τὸν τόπον ὥστ' ἐνταῦθα μὲν ἄνω φαίνεσθαι[1] φερόμενον τὸ πῦρ ὅταν δ' εἰς τὸν οὐρανὸν παραγένηται τῇ δίνῃ συμπεριστρέφεσθαι, τί θαυμαστὸν εἰ καὶ τοῖς βαρέσι καὶ γεώδεσιν ἐκεῖ γενο-
D μένοις[2] συμβέβηκεν ὡσαύτως εἰς ἄλλο κινήσεως εἶδος ὑπὸ τοῦ περιέχοντος ἐκνενικῆσθαι; οὐ γὰρ δὴ τῶν μὲν ἐλαφρῶν τὴν ἄνω φορὰν ἀφαιρεῖσθαι τῷ οὐρανῷ κατὰ φύσιν ἐστὶ τῶν δὲ βαρέων καὶ κάτω ῥεπόντων οὐ δύναται κρατεῖν, ἀλλ' ⟨ᾗ⟩[3] ποτ' ἐκεῖνα δυνάμει καὶ ταῦτα μετακοσμήσας ἐχρήσατο τῇ φύσει αὐτῶν ἐπὶ τὸ βέλτιον.

14. Οὐ μὴν ἀλλ' εἴ γε δεῖ τὰς καταδεδουλωμένας ἕξεις ⟨καὶ⟩[4] δόξας ἀφέντας ἤδη τὸ φαινόμενον ἀδεῶς λέγειν, οὐδὲν ἔοικεν ὅλου μέρος αὐτὸ καθ' ἑαυτὸ τάξιν ἢ θέσιν ἢ κίνησιν ἰδίαν ἔχειν ἣν[5] ἄν τις ἁπλῶς κατὰ φύσιν προσαγορεύσειεν. ἀλλ' ὅταν
E ἕκαστον, οὗ χάριν γέγονε καὶ πρὸς ὃ πέφυκεν ἢ πεποίηται, τούτῳ παρέχῃ[6] χρησίμως καὶ οἰκείως κινούμενον ἑαυτὸ καὶ πάσχον ἢ ποιοῦν ἢ διακείμενον ὡς ἐκείνῳ πρὸς σωτηρίαν ἢ κάλλος ἢ δύναμιν

[1] E; φέρεσθαι -B.
[2] Wyttenbach; ἐκγενομένοις -E, B.
[3] Emperius; ἀλλ vac. 2 ποτέ -E; ἀλλ' vac. 2 ποτε -B.
[4] Xylander (*cf. Numa*, xxii. 74 D: ἕξιν τε καὶ γνώμην); ἕξεις vac. 3 δόξας -E; ἕξεις vac. 5-7 (at end of line) δόξας -B.
[5] Basiliensis: ᾗ -E, B.
[6] -Anon., Aldine, R.J. 94; παρέχειν -E, B; παρέχει -Basiliensis.

[a] The Stoics held that the heavenly bodies consist of fire, which, though they call it αἰθήρ, is not a "fifth essence" like Aristotle's (*cf.* Diogenes Laertius, vii. 137 = *S.V.F.* ii, frag.

and not in a circle.[a] If, however, nature includes such variation in accordance with location that fire, though it is seen to move upwards here, as soon as it has reached the heavens revolves along with their rotation, what wonder is there that the same thing has happened to heavy and earthy bodies that have got there and that they too have been reduced by the environment to a different kind of motion? For it certainly cannot be that heaven 'naturally' deprives light objects of their upward motion but is unable to master objects that are heavy and have a downward inclination; on the contrary, by ⟨whatever⟩ influence it rearranged the former it rearranged the latter too and employed the nature of both of them for the better.

14. What is more, if we are finally to throw off the habits ⟨and⟩ opinions that have held our minds in thrall and fearlessly to say what really appears to be the case, no part of a whole all by itself seems to have any order, position, or motion of its own which could be called unconditionally 'natural.'[b] On the contrary, each and every such part, whenever its motion is usefully and properly accommodated to that for the sake of which the part has come to be and which is the purpose of its growth or production, and whenever it acts or is affected or disposed so that it contributes to the preservation or beauty or function

580; *S.V.F.* ii, frag. 682). In *De Stoicorum Repugnantiis*, 1053 E Plutarch quotes Chrysippus to the effect that τὸ πῦρ ἀβαρὲς ὂν ἀνωφερὲς εἶναι (=*S.V.F.* ii, frag. 434). In accordance with this, he here argues, the Stoics are not justified in explaining the circular motion of the heavenly bodies as "natural" in the way that Aristotle did.

[b] *Cf.* Plutarch, frag. vii. 15 (Bernardakis, vol. vii, p. 31. 6 ff.=Olympiodorus, *In Phaedonem*, p. 157. 22-25 [Norvin]).

(927) ἐπιτήδειόν ἐστι, τότε δοκεῖ τὴν κατὰ φύσιν χώραν ἔχειν καὶ κίνησιν καὶ διάθεσιν. ὁ γοῦν ἄνθρωπος, ὡς εἴ τι[1] τῶν ὄντων ἕτερον κατὰ φύσιν γεγονώς,
F ἄνω μὲν ἔχει τὰ[2] ἐμβριθῆ καὶ γεώδη μάλιστα περὶ τὴν κεφαλὴν ἐν δὲ τοῖς μέσοις τὰ θερμὰ καὶ πυρώδη· τῶν δ' ὀδόντων οἱ μὲν ἄνωθεν οἱ δὲ κάτωθεν ἐκφύονται[3] καὶ οὐδέτεροι παρὰ φύσιν ἔχουσιν, οὐδὲ τοῦ πυρὸς τὸ μὲν ἄνω περὶ τὰ ὄμματα ἀποστίλβον κατὰ φύσιν ἐστὶ τὸ δ' ἐν κοιλίᾳ καὶ καρδίᾳ παρὰ φύσιν ἀλλ' ἕκαστον οἰκείως καὶ χρησίμως τέτακται.

ναὶ μὴν κηρύκων τε λιθορρίνων χελύων[4] τε

καὶ παντὸς ὀστρέου φύσιν, ὥς φησιν ὁ Ἐμπεδοκλῆς, καταμανθάνων

ἔνθ' ὄψει χθόνα χρωτὸς ὑπέρτατα[5] ναιετάουσαν·

καὶ οὐ πιέζει τὸ λιθῶδες οὐδὲ καταθλίβει τὴν ἕξιν
928 ἐπικείμενον οὐδέ γε πάλιν τὸ θερμὸν ὑπὸ κουφότητος εἰς τὴν ἄνω χώραν ἀποπτάμενον οἴχεται μέμικται δέ πως πρὸς ἄλληλα καὶ συντέτακται κατὰ τὴν ἑκάστου φύσιν.

15. Ὥσπερ εἰκὸς ἔχειν καὶ τὸν κόσμον, εἴ γε δὴ ζῷόν ἐστι, πολλαχοῦ γῆν ἔχοντα πολλαχοῦ δὲ πῦρ

[1] Wyttenbach (implied by versions of Amyot and Kepler) ; ἐπὶ -E, B. [2] E ; τὸν -B.

[3] E ; ἐμφύονται (κ written above μ) -B.

[4] Xylander (*cf. Quaest. Conviv.* 618 B) ; χελωνῶν -E, B.

[5] B ; ὑπέρταυτα -E.

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[a] The two lines here quoted and the line that preceded them are quoted together in support of the same contention in *Quaest. Conviv.* 618 B = Empedocles, frag. B 76 (i, p. 339. 9-11 [Diels-Kranz]).

[b] For ἕξις = " the bodily constitution " *cf. Quaest. Conviv.* 625 A-B, 680 D, 681 E ; *Amatorius*, 764 C.

of that thing, then, I believe, it has its 'natural' position and motion and disposition. In man, at any rate, who is the result of 'natural' process if any being is, the heavy and earthy parts are above, chiefly in the region of the head, and the hot and fiery parts are in the middle regions; some of the teeth grow from above and some from below, and neither set is 'contrary to nature'; and it cannot be said that the fire which flashes in the eyes above is 'natural' whereas that in the bowels and heart is 'contrary to nature,' but each has been assigned its proper and useful station. Observe, as Empedocles says,[a] the nature of

> Tritons and tortoises with hides of stone

and of all testaceans,

> Thou'lt see earth there established over flesh;

and the stony matter does not oppress or crush the constitution[b] on which it is superimposed, nor on the other hand does the heat by reason of lightness fly off to the upper region and escape, but they have been somehow intermingled and organically combined in accordance with the nature of each.

15. Such is probably the case with the cosmos too, if it really is a living being[c]: in many places it has

[c] In *Adv. Coloten*, 1115 B Strato's denial of this is cited as an example of his opposition to Plato; and in *De An. Proc. in Timaeo*, 1014 C-D Plutarch, speaking of the creation of the world by the Platonic demiurge, says τὸ κάλλιστον ἀπεργασάμενος καὶ τελειότατον . . . ζῷον, thereby referring to such passages as *Timaeus*, 30 B-D, 32 C-D, 68 E, 69 B-C. Still, Platonic though it is, this assumption is one which his Stoic adversaries would grant (*cf.* Diogenes Laertius, vii. 139 and 142-143 [=*S.V.F.* ii, frags. 634 and 633]); and Plutarch believes that in granting it they are committed to the implication that the moon despite its location can consist of earth.

(928) καὶ ὕδωρ καὶ πνεῦμα οὐκ ἐξ ἀνάγκης ἀποτεθλιμμένον ἀλλὰ λόγῳ διακεκοσμημένον. οὐδὲ γὰρ ὀφθαλμὸς ἐνταῦθα τοῦ σώματός ἐστιν ὑπὸ κουφό-
B τητος ἐκπιεσθεὶς οὐδ' ἡ καρδία τῷ βάρει ὀλισθοῦσα πέπτωκεν εἰς τὸ στῆθος, ἀλλ' ὅτι βέλτιον ἦν οὕτως ἑκάτερον τετάχθαι. μὴ τοίνυν μηδὲ[1] τῶν τοῦ κόσμου μερῶν νομίζωμεν μήτε γῆν ἐνταῦθα κεῖσθαι συμπεσοῦσαν διὰ βάρος μήτε τὸν ἥλιον, ὡς ᾤετο Μητρόδωρος ὁ Χῖος, εἰς τὴν ἄνω χώραν ἀσκοῦ δίκην ὑπὸ κουφότητος ἐκτεθλῖφθαι μήτε τοὺς ἄλλους ἀστέρας, ὥσπερ ἐν ζυγῷ σταθμοῦ[2] διαφορᾷ ῥέψαντας,[3] ἐν οἷς εἰσι γεγονέναι τόποις· ἀλλὰ τοῦ κατὰ λόγον κρατοῦντος οἱ μὲν ὥσπερ ὄμματα φωσφόρα τῷ προσώπῳ τοῦ παντὸς ἐνδεδεμένοι περιπολοῦσιν, ἥλιος δὲ καρδίας ἔχων δύναμιν
C ὥσπερ αἷμα καὶ πνεῦμα διαπέμπει καὶ διασκεδάννυσιν ἐξ ἑαυτοῦ θερμότητα καὶ φῶς, γῇ δὲ καὶ θαλάσσῃ χρῆται κατὰ φύσιν ὁ κόσμος ὅσα κοιλίᾳ καὶ κύστει ζῷον. σελήνη δ' ἡλίου μεταξὺ καὶ γῆς ὥσπερ καρδίας καὶ κοιλίας ἧπαρ ἤ τι μαλθακὸν

[1] Emperius ; μήτε -E, B.
[2] E ; ζυγωσταθμοῦ -B.
[3] B ; ῥέψαντος -E.

[a] *Cf.* Aristotle, *De Caelo*, 277 b 1-2 : οὐδὲ βίᾳ (*scil.* φέρεται αὐτῶν τὸ μὲν ἄνω τὸ δὲ κάτω) ὥσπερ τινές φασι τῇ ἐκθλίψει, and Cherniss, *Aristotle's Criticism of Presocratic Philosophy*, p. 191, n. 196.

[b] For this Atomist, who is not to be confused with the Epicurean, Metrodorus of Lampsacus, or with the Anaxagorean, *cf.* Diels-Kranz, *Frag. der Vorsok.*[5] ii, pp. 231-234 ; the present passage should be added to that collection, from which it is missing. According to *De Placitis*, 889 B (= Aëtius, ii. 15. 6 [*Dox. Graeci*, p. 345 a 7-12]) Metrodorus con-

earth and in many fire and water and breath as the result not of forcible expulsion [a] but of rational arrangement. After all, the eye has its present position in the body not because it was extruded thither as a result of its lightness, and the heart is in the chest not because its heaviness has caused it to slip and fall thither but because it was better that each of them should be so located. Let us not then believe with regard to the parts of the cosmos either that earth is situated here because its weight has caused it to subside or that the sun, as Metrodorus of Chios [b] once thought, was extruded into the upper region like an inflated skin by reason of its lightness or that the other stars got into their present positions because they tipped the balance, as it were, at different weights. On the contrary, the rational principle is in control ; and that is why the stars revolve fixed like ' radiant eyes ' [c] in the countenance of the universe, the sun in the heart's capacity transmits and disperses out of himself heat and light as it were blood and breath, and earth and sea ' naturally ' serve the cosmos to the ends that bowels and bladder do an animal. The moon, situate between sun and earth as the liver or another of the soft

sidered the sun to be farthest from the earth, the moon below it, and lower than the moon the planets and fixed stars. For the explanation of the sun's position here ascribed to Metrodorus see note *a supra* and *cf.* Simplicius, *De Caelo*, p. 712. 27-29.

[c] In *De Fortuna*, 98 B the phrase is quoted as Plato's ; it comes from *Timaeus*, 45 B (*τῶν δὲ ὀργάνων πρῶτον μὲν φωσφόρα συνετεκτήναντο ὄμματα, τοιᾷδε ἐνδήσαντες αἰτίᾳ*), and Plutarch's *τῷ προσώπῳ τοῦ παντὸς ἐνδεδεμένοι* was suggested by this in conjunction with the preceding lines (45 A : . . . *ὑποθέντες αὐτόσε τὸ πρόσωπον, ὄργανα ἐνέδησαν τούτῳ*), though Plato is there speaking of the human face and eyes.

(928) ἄλλο σπλάγχνον ἐγκειμένη τήν τ' ἄνωθεν ἀλέαν ἐνταῦθα διαπέμπει καὶ τὰς ἐντεῦθεν ἀναθυμιάσεις πέψει τινὶ καὶ καθάρσει λεπτύνουσα περὶ ἑαυτὴν ἀναδίδωσιν· εἰ δὲ καὶ πρὸς ἄλλα τὸ γεῶδες αὐτῆς καὶ στερέμνιον ἔχει τινὰ πρόσφορον χρείαν, ἄδηλον ἡμῖν. ἐν παντὶ δὲ κρατεῖ τὸ βέλτιον τοῦ κατηναγκασμένου.[1] τί γὰρ οὕτως[2] λάβωμεν ἐξ ὧν ἐκεῖνοι λέγουσι τὸ εἰκός; λέγουσί γε[3] τοῦ αἰθέρος D τὸ μὲν αὐγοειδὲς καὶ λεπτὸν ὑπὸ μανότητος οὐρανὸν γεγονέναι τὸ δὲ πυκνωθὲν καὶ συνειληθὲν ἄστρα, τούτων δὲ τὸ νωθρότατον εἶναι τὴν σελήνην καὶ θολερώτατον. ἀλλ' ὅμως ὁρᾶν πάρεστιν οὐκ ἀποκεκριμένην[4] τοῦ αἰθέρος τὴν σελήνην ἀλλ' ἔτι

[1] Wyttenbach (though Xylander had already proposed τοῦ κατηναγκασμένου); κρατεῖται βέλτιον τοῦτο κατηναγκασμένον -E, B. [2] E: οὕτω -B. [3] H. C.; δὲ -E, B.
[4] Basiliensis; ἀποκεκριμένου -E; ἀποκεκρυμμένου -B.

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[a] *i.e.* the spleen. For the purpose of liver and spleen *cf.* Aristotle, *De Part. Animal.* 670 a 20-29, 670 b 4-17, 673 b 25-28: and for the close connection of liver and spleen 669 b 15—670 a 2.

[b] Eustathius, *Ad Iliadem*, 695. 12 ff. says that according to the Stoics the "golden rope" of *Iliad*, viii. 19 is ὁ ἥλιος εἰς ὃν κάτωθεν ὥσπερ εἰς καρδίαν ἀποχεῖται ἀναδιδομένη ἡ τῶν ὑγρῶν ἀναθυμίασις. Starting from this K. Reinhardt (*Kosmos und Sympathie*, pp. 332 ff.) argued that Posidonius was Plutarch's source for the analogy between the parts of the cosmos and the organs of the body: but Reinhardt's contention is refuted by R. M. Jones, *Class. Phil.* xxvii (1932), pp. 121-128. Passages which equate sun and heart are fairly frequent, *e.g.* Theon of Smyrna, pp. 187. 13–188. 7 (Hiller); Proclus, *In Timaeum*, 171 C-D (ii, p. 104. 20-21 and 28-29, Diehl); Macrobius, *Somn. Scip.* i. 20. 6-7 (pp. 564-565, Eyssenhardt); Chalcidius, *In Platonis Timaeum*, § 100 (p. 170, Wrobel); "Anon. Christ.", *Hermippus*, pp. 17. 15–18. 11 (Kroll-Viereck) with astrological ascriptions of different bodily organs to the seven planets. An entirely different

viscera [a] is between heart and bowels, transmits hither the warmth from above and sends upwards the exhalations from our region, refining them in herself by a kind of concoction and purification.[b] It is not clear to us whether her earthiness and solidity have any use suitable to other ends also. Nevertheless, in everything the better has control of the necessary.[c] Well, what probability can we thus conceive in the statements of the Stoics? They say that the luminous and tenuous part of the ether by reason of its subtility became sky and the part which was condensed or compressed became stars, and that of these the most sluggish and turbid is the moon.[d] Yet all the same anyone can see that the moon has not been separated from the ether but that there is

analogy between the various human faculties and the seven planets is mentioned by Proclus, *In Timaeum*, 348 A-B (iii, p. 355. 7-18, Diehl), and Numenius in Macrobius, *Somn. Scip.* i. 12. 14-15 (p. 533, Eyssenhardt): and I know no parallel to Plutarch's further analogy of earth and moon with bowels and liver or spleen. In the pseudo-Hippocratic Περὶ ἑβδομάδων the moon because of its central position in the cosmos appears to have been equated with the diaphragm (*cf.* Roscher, *Die hippokratische Schrift von der Siebenzahl*, p. 5. 45 ff., pp. 10-11, p. 123). In the section of Porphyry's "Introduction to Ptolemy's *Apotelesmatica*" published by F. Cumont in *Mélanges Bidez*, i, pp. 155-156, the source of which Cumont contends must have been Antiochus of Athens, the moon is said to have the spleen as its special province, while the heart is assigned to the sun; but there the liver is the province of Jupiter.

[c] *Cf.* Plato, *Timaeus*, 48 A: νοῦ δὲ ἀνάγκης ἄρχοντος τῷ πείθειν αὐτὴν τῶν γιγνομένων τὰ πλεῖστα ἐπὶ τὸ βέλτιστον ἄγειν κτλ. For the term τὸ κατηναγκασμένον *cf.* *S.V.F.* ii. frag. 916.

[d] = *S.V.F.* ii. frag. 668; *cf.* Cleomedes, ii. 3. 99 (pp. 178. 26–180. 8, Ziegler) and contrast ii. 4. 100 (p. 182. 8-10). On the Stoic "ether" *cf.* Diogenes Laertius, vii. 137 (= *S.V.F.* ii, frag. 580) and note *g* on 922 B *supra*.

(928) πολλῷ μὲν[1] τῷ περὶ αὑτὴν[2] ἐμφερομένην πολὺν[3] δ' ὑφ' ἑαυτὴν ἔχουσαν ἐν ᾧ[4] ⟨λέγουσιν αὐτοὶ τοὺς πωγωνίας⟩[5] δινεῖσθαι καὶ κομήτας. οὕτως οὐ ταῖς ῥοπαῖς σεσήκωται κατὰ βάρος καὶ κουφότητα τῶν σωμάτων ἕκαστον ἀλλ' ἑτέρῳ λόγῳ κεκόσμηται."

16. Λεχθέντων δὲ τούτων κἀμοῦ τῷ Λευκίῳ τὸν
E λόγον παραδιδόντος, ἐπὶ τὰς ἀποδείξεις βαδίζοντος τοῦ δόγματος, Ἀριστοτέλης μειδιάσας "μαρτύρομαι" εἶπεν "ὅτι τὴν πᾶσαν ἀντιλογίαν πεποίησαι πρὸς τοὺς αὐτὴν μὲν ἡμίπυρον εἶναι τὴν σελήνην ὑποτιθεμένους κοινῇ δὲ τῶν σωμάτων τὰ μὲν ἄνω τὰ δὲ κάτω ῥέπειν ἐξ ἑαυτῶν φάσκοντας. εἰ δ' ἔστι τις ὁ λέγων κύκλῳ τε κινεῖσθαι κατὰ φύσιν τὰ ἄστρα καὶ πολὺ παρηλλαγμένης οὐσίας εἶναι τῶν
F τεττάρων, οὐδ' ἀπὸ τύχης ἦλθεν ἐπὶ μνήμην ὑμῖν,[6] ὥστ' ἐμέ γε[7] πραγμάτων ἀπηλλάχθαι." καὶ ⟨ὑπολαβὼν ὁ⟩[8] Λεύκιος "⟨. . .⟩[9] ὠγαθὲ" εἶπεν "ἀλλὰ τἆλλα μὲν ἴσως ἄστρα καὶ τὸν ὅλον οὐρανὸν εἴς τινα φύσιν καθαρὰν καὶ εἰλικρινῆ καὶ τῆς κατὰ πάθος ἀπηλλαγμένην μεταβολῆς τιθεμένοις ὑμῖν[10]

1 Benseler: ἐν -E, B.
2 Bernardakis: αὐτὴν -E, B.
3 Madvig; πολλὴν -E, B.
4 Madvig; ἔχουσαν ἀνέμων -E, B.
5 H. C. (*cf.* *Class. Phil.* xlvi [1951], pp. 141 f.); vac. 25-E, 26-B.
6 Amyot: ἡμῖν -E, B.
7 Turnebus; τε -E, B.
8 H. C.; καὶ vac. 8-E (at end of line), 9-B.
9 λεύκιος vac. 9-E, 11-B.
10 Turnebus: ἡμῖν -E, B.

[a] The lexica give "weigh" or "balance" as the meaning of σεσήκωται, but the logic of the passage here shows that the word must be connected with σηκός, not with σήκωμα (*cf.* Hesychius: ἀποσηκώσας and σάκωσε). Amyot's "situez et

still a large amount of it about her in which she moves and much of it beneath her in which ⟨they themselves assert that the bearded stars⟩ and comets whirl. So it is not the inclinations consequent upon weight and lightness that have circumscribed the precincts [a] of each of the bodies, but their arrangement is the result of a different principle."

16. With these remarks I was about to yield the floor to Lucius,[b] since the proofs of our position were next in order; but Aristotle smiled and said: "The company is my witness that you have directed your entire refutation against those who suppose that the moon is for her part semi-igneous and yet assert of all bodies in common that of themselves they incline either upwards or downwards. Whether there is anyone, however, who says [c] that the stars move naturally in a circle and are of a substance far superior to the four substances here [d] did not even accidentally come to your notice, so that I at any rate have been spared trouble." And Lucius ⟨broke in and⟩ said: ". . . good friend, probably one would not for the moment quarrel with you and your friends, despite the countless difficulties involved, when you ascribe to the other stars and the whole heaven a nature pure and undefiled and free from qualitative change and

colloquez" and Kepler's "quasi obvallata sunt" render the sense correctly.

[b] It was ostensibly in order to give Lucius time to collect his thoughts that Lamprias began the "remarks" which he has just concluded after ten paragraphs (see 923 F *supra*).

[c] This is Aristotle, of course: *De Caelo*, 269 a 2-18, 270 a 12-35; *cf.* [Aristotle], *De Mundo*, 392 a 5-9 and *De Placitis*, 887 D = Aëtius, ii. 7. 5 (*Dox. Graeci*, p. 336).

[d] I have added this word in the translation in order to make it clear that "the four" are the four sublunar substances, earth, water, air, and fire.

(928) καὶ κύκλον ἄγουσαν[1] δι' οὗ καὶ ἀτελευτήτου περιφορᾶς ⟨οἷόν τε φύσιν ἔχειν⟩[2] οὐκ ἄν τις ἔν γε τῷ νῦν διαμάχοιτο καίτοι μυρίων οὐσῶν ἀποριῶν· ὅταν δὲ καταβαίνων ὁ λόγος οὗτος[3] θίγῃ τῆς σελήνης, οὐκέτι φυλάττει τὴν ἀπάθειαν ἐν αὐτῇ καὶ τὸ κάλλος ἐκείνου τοῦ σώματος ἀλλ' ἵνα τὰς ἄλλας ἀνωμαλίας καὶ διαφορὰς ἀφῶμεν αὐτὸ τοῦτο τὸ διαφαινόμενον πρόσωπον πάθει τινὶ τῆς οὐσίας ἢ ἀναμίξει πως ἑτέρας ἐπιγέγονε. πάσχει δέ τι καὶ
929 τὸ μιγνύμενον· ἀποβάλλει γὰρ τὸ εἰλικρινὲς βίᾳ τοῦ χείρονος ἀναπιμπλάμενον. αὐτῆς δὲ νώθειαν καὶ τάχους ἀμβλύτητα καὶ τὸ θερμὸν ἀδρανὲς καὶ ἀμαυρόν, ⟨ᾧ⟩[4] κατὰ τὸν Ἴωνα

μέλας οὐ πεπαίνεται βότρυς,

εἰς τί θησόμεθα πλὴν ἀσθένειαν αὐτῆς καὶ πάθος, ⟨εἰ πάθους⟩[5] ἀιδίῳ σώματι καὶ ὀλυμπίῳ μέτεστιν; ὅλως γάρ, ὦ φίλε Ἀριστότελες, γῆ μὲν οὖσα πάγκαλόν τι χρῆμα καὶ σεμνὸν ἀναφαίνεται καὶ κεκοσμημένον· ὡς δ' ἄστρον ἢ φῶς ἤ τι σῶμα θεῖον καὶ οὐράνιον δέδια μὴ ἄμορφος ᾖ καὶ ἀπρεπὴς καὶ καταισχύνουσα τὴν καλὴν ἐπωνυμίαν, εἴ γε τῶν ἐν

[1] H. C. (*cf. Class. Phil.* xlvi [1951], p. 142) ; ἄγουσι -E, B.
[2] H. C. : vac. 17-E, 15-B.
[3] Wyttenbach ; οὕτω -E, B.
[4] Basiliensis ; ἀμαυρόν, κατὰ -E : ἀμαυρὸν καὶ κατὰ -B.
[5] Dübner : πάθος ἀϊδίῳ without lacuna -E, B : " Deest aliquid " -Xylander : ⟨εἰ πάθη⟩ -Turnebus, Vulcobius ; ⟨εἰ πάθος⟩ -Reiske, Wyttenbach.

[a] *Cf.* Aëtius, ii. 30. 6 (*Dox. Graeci*, p. 362 b 1-4) : Ἀριστοτέλης μὴ εἶναι αὐτῆς (*scil.* σελήνης) ἀκήρατον τὸ σύγκριμα διὰ τὰ πρόσγεια ἀερώματα τοῦ αἰθέρος, ὃν προσαγορεύει σῶμα πέμ-

moving in a circle whereby ⟨it is possible to have the nature⟩ of endless revolution too ; but let this doctrine descend and touch the moon, and in her it no longer preserves the impassivity and beauty of that body. Not to mention her other irregularities and divergencies, this very face which she displays is the result of some alteration of her substance or of the admixture somehow of another substance.[a] That which is subjected to mixture, however, is the subject of some affection too, for it loses its purity, since it is perforce infected by what is inferior to it. The moon's sluggishness and slackness of speed and the feebleness and faintness of her heat ⟨which⟩, in the words of Ion,

ripes not the grape to duskiness,[b]

to what shall we ascribe them except to her weakness and alteration, ⟨if⟩ an eternal and celestial[c] body can have any part in ⟨alteration⟩ ? The fact is in brief, my dear Aristotle, that regarded as earth the moon has the aspect of a very beautiful, august, and elegant object ; but as a star or luminary or a divine and heavenly body she is, I am afraid, misshapen, ugly, and a disgrace to the noble title, if it is true

πτον. In fact in *De Gen. Animal.* 761 b 22 Aristotle does say that the moon shares in the fourth body, *i.e.* fire.

[b] At *Quaest. Conviv.* 658 c Plutarch quotes the whole line, Ion, frag. 57 (Nauck[2]).

[c] For the epithet ὀλύμπιος used of the moon *cf.* 935 c *infra* and *De Defectu Oraculorum*, 416 E : *οἱ δ' ὀλυμπίαν γῆν* (*scil. σελήνην*) . . . *προσεῖπον*, and for the meaning attached to it *cf.* the etymology in the pseudo-Plutarchian *De Vita et Poesi Homeri*, B, 95 [vii, p. 380. 17-20, Bernardakis] ; Pseudo-Plutarch in Stobaeus, *Eclogae*, i. 22 (i, p. 198. 10 ff., Wachsmuth) ; [Aristotle], *De Mundo*, 400 a 6-9 ; Eustathius, *In Iliadem*, 38. 38.

(929) οὐρανῷ τοσούτων τὸ πλῆθος ὄντων μόνη φωτὸς ἀλλοτρίου δεομένη περίεισι[1] κατὰ Παρμενίδην

B αἰεὶ[2] παπταίνουσα πρὸς αὐγὰς ἠελίοιο.

ὁ μὲν οὖν ἑταῖρος ἐν τῇ διατριβῇ τοῦτο δὴ τὸ Ἀναξαγόρειον ἀποδεικνὺς ὡς ' ἥλιος ἐντίθησι τῇ σελήνῃ τὸ λαμπρὸν ' ηὐδοκίμησεν· ἐγὼ δὲ ταῦτα μὲν οὐκ ἐρῶ ἃ παρ' ὑμῶν ἢ μεθ' ὑμῶν ἔμαθον ἑκὼν δὲ[3] πρὸς τὰ λοιπὰ βαδιοῦμαι. φωτίζεσθαι τοίνυν τὴν σελήνην οὐχ ὡς ὕελον[4] ἢ κρύσταλλον ἐλλάμψει καὶ διαφαύσει τοῦ ἡλίου πιθανόν ἐστιν οὐδ'[5] αὖ κατὰ σύλλαμψίν τινα καὶ συναυγασμὸν ὥσπερ αἱ δᾷδες αὐξομένου τοῦ φωτός. οὕτως[6] γὰρ οὐδὲν ἧττον ἐν νουμηνίαις ἢ διχομηνίαις ἔσται πανσέληνος ἡμῖν, εἰ C μὴ στέγει μηδ' ἀντιφράττει τὸν ἥλιον ἀλλὰ διίησιν[7] ὑπὸ μανότητος ἢ κατὰ σύγκρασιν ἐκλάμπει[8] καὶ συνεξάπτει περὶ αὐτὴν[9] τὸ φῶς. οὐ γάρ ἐστιν[10]

[1] E, B²; περίεστι -B¹.
[2] -Anon., Aldine, R.J. 94; ἀεὶ -E, B.
[3] Xylander; ἔχων δὲ τοῦτο -E; ἔχων δὲ -B.
[4] Basiliensis; ὕελλον -E; ὕε^λλον -B.
[5] Bernardakis; οὔτ' -E, B.
[6] E; οὕτω -B.
[7] Madvig (implied by versions of Amyot and Kepler); δίεισιν -E, B.
[8] Sandbach (citing Appian, *Syr.* 56: τὴν ἑστίαν . . . ἐκλάμψαι πῦρ μέγα); εἰσλάμπει -E, B.
[9] Sandbach; αὐτὴν -E, B.
[10] Bernardakis; γάρ ἐστιν -E, B.

[a] At *Adv. Coloten* 1116 A Plutarch quotes Parmenides as having called the moon ἀλλότριον φῶς (=Parmenides, frag. B 14 [i, p. 243. 19, Diels-Kranz]); *cf.* Empedocles, frag. B 45 (i, p. 331. 2 [Diels-Kranz]).
[b] =Parmenides, frag. B 15 (i, p. 244. 3 [Diels-Kranz]), quoted also at *Quaest. Rom.* 282 B.
[c] See note *a* on p. 48 *supra*.

that of all the host in heaven she alone goes about in need of alien light,[a] as Parmenides says

Fixing her glance forever on the sun.[b]

Our comrade in his discourse [c] won approval by his demonstration of this very proposition of Anaxagoras's that ' the sun imparts to the moon her brilliance ' [d] ; for my part, I shall not speak about these matters that I learned from you or in your company but shall gladly proceed to what remains. Well then, it is plausible that the moon is illuminated not by the sun's irradiating and shining through her in the manner of glass [e] or ice [f] nor again as the result of some sort of concentration of brilliance or aggregation of rays, the light increasing as in the case of torches.[g] Were that true, we should see the moon at the full on the first of the month no less than in the middle of the month, if she does not conceal and obstruct the sun but because of her subtility lets his light through or as a result of combining with it flashes forth and joins in kindling the light in herself.[h] Certainly her deviations or aversions [i] cannot be

[d] =Anaxagoras, frag. B 18 (ii, p. 41. 5-7 [Diels-Kranz]).

[e] *Cf.* Aëtius, ii. 25. 11 (*Dox. Graeci*, p. 356 b 21)=Ion of Chios, frag. A 7 (i, p. 378. 33-34 [Diels-Kranz]).

[f] See note *c* on 922 c *supra*.

[g] *Cf. De Placitis*, 891 F=Aëtius, ii. 29. 4 (*Dox. Graeci*, p. 360 a 3-8 and b 5-11).

[h] The latter was the theory of Posidonius as Plutarch indicates in 929 D *infra* ; *cf.* Cleomedes, ii. 4. 101 (pp. 182. 20–184. 3 [Ziegler]) and ii. 4. 104-105 (pp. 188. 5–190. 16).

[i] *i.e.* the various deflections of the moon in latitude and the varying portion of the lunar hemisphere turned away from the sun as the moon revolves in her orbit. For these two variations in the explanation of the lunar phases *cf.* Cleomedes, ii. 4. 100 (pp. 180. 26–182. 7 [Ziegler]), and Geminus, ix. 5-12 (p. 126. 5 ff. [Manitius]).

(929) ἐκκλίσεις οὐδ' ἀποστροφὰς αὐτῆς, ὥσπερ ὅταν ᾖ διχότομος καὶ ἀμφίκυρτος ἢ μηνοειδής, αἰτιᾶσθαι περὶ τὴν σύνοδον ἀλλὰ κατὰ στάθμην, φησὶ Δημόκριτος, ἱσταμένη τοῦ φωτίζοντος ὑπολαμβάνει καὶ δέχεται τὸν ἥλιον, ὥστ' αὐτήν τε φαίνεσθαι καὶ διαφαίνειν ἐκεῖνον εἰκὸς ἦν. ἡ δὲ πολλοῦ δεῖ τοῦτο ποιεῖν· αὐτή τε γὰρ ἄδηλός ἐστι τηνικαῦτα κἀκεῖνον ἀπέκρυψε καὶ ἠφάνισε πολλάκις

ἀπεσκέδασεν[1] δέ οἱ αὐγάς

ὥς φησιν[2] Ἐμπεδοκλῆς

D ἔστ' αἶαν καθύπερθεν, ἀπεσκνίφωσε δὲ γαίης
τόσσον ὅσον τ' εὖρος γλαυκώπιδος ἔπλετο μήνης[3]

καθάπερ εἰς νύκτα καὶ σκότος οὐκ εἰς ἄστρον ἑτερό⟨ν τι⟩[4] τοῦ φωτὸς ἐμπεσόντος. ὃ δὲ λέγει Ποσειδώνιος, ὡς ὑπὸ βάθους τῆς σελήνης οὐ περαιοῦται δι' αὐτῆς[5] τὸ τοῦ ἡλίου φῶς πρὸς ἡμᾶς, ἐλέγχεται καταφανῶς. ὁ γὰρ ἀὴρ ἄπλετος ὢν καὶ βάθος ἔχων πολλαπλάσιον τῆς σελήνης ὅλος[6] ἐξηλιοῦται καὶ καταλάμπεται ταῖς αὐγαῖς. ἀπολείE πεται τοίνυν τὸ τοῦ Ἐμπεδοκλέους, ἀνακλάσει τινὶ τοῦ ἡλίου πρὸς τὴν σελήνην γίγνεσθαι τὸν ἐνταῦθα

[1] Xylander; ἀπεσκεύασε -E, B.
[2] B; ὡς φησὶν -E.
[3] E: ἔπλετο γλαυκώπιδος μήνης -B.
[4] Papabasileios; ἑτερο vac. 2-E, 4-B.
[5] B; διαυτῆς -E.
[6] E; ὅλως -B.

[a] = Democritus, frag. A 89 a (ii, p. 105. 32-34 [Diels-Kranz]). For the meaning of κατὰ στάθμην cf. *De Placitis*,

alleged as the cause of her invisibility when she is in conjunction, as they are when she is at the half and gibbous or crescent ; then, rather, 'standing in a straight line with her illuminant,' says Democritus, 'she sustains and receives the sun,' [a] so that it would be reasonable for her to be visible and to let him shine through. Far from doing this, however, she is at that time invisible herself and often has concealed and obliterated him.

His beams she put to flight,

as Empedocles says,

From heaven above as far as to the earth,
Whereof such breadth as had the bright-eyed moon
She cast in shade,[b]

just as if the light had fallen into night and darkness and not upon ⟨an⟩other star. As for the explanation of Posidonius that the profundity of the moon prevents the light of the sun from passing through her to us,[c] this is obviously refuted by the fact that the air, though it is boundless and has many times the profundity of the moon, is in its entirety illuminated and filled with sunshine by the rays. There remains then the theory of Empedocles that the moonlight which we see comes from the moon's reflection of

883 A, 884 C. The words ὑπολαμβάνει καὶ δέχεται have a sexual meaning here ; *cf.* 944 E *infra*, *De Iside*, 372 D, *Amatorius*, 770 A, and Roscher, *Über Selene und Verwandtes*, pp. 76 ff.

[b] = Empedocles, frag. B 42 (i, p. 330. 11-13 [Diels-Kranz]).

[c] See note *h* on 929 C *supra*. In Cleomedes, ii. 4. 105 (p. 190. 4-16 [Ziegler]) the refutation given by Plutarch here is answered or anticipated by the statement that the air does *not* have βάθος as the moon does, and from what follows it appears that by the βάθος of the moon Posidonius must have meant not mere spatial depth but a certain density as well.

(929) φωτισμὸν ἀπ' αὐτῆς. ὅθεν οὐδὲ θερμὸν οὐδὲ λαμπρὸν ἀφικνεῖται πρὸς ἡμᾶς, ὥσπερ ἦν εἰκὸς ἐξάψεως καὶ μίξεως ⟨τῶν⟩[1] φώτων γεγενημένης. ἀλλ' οἷον αἵ τε φωναὶ κατὰ τὰς ἀνακλάσεις ἀμαυροτέραν[2] ἀναφαίνουσι τὴν ἠχὼ τοῦ φθέγματος αἵ τε πληγαὶ τῶν ἀφαλλομένων βελῶν μαλακώτεραι προσπίπτουσιν

ὣς αὐγὴ[3] τύψασα σεληναίης κύκλον εὐρὺν

ἀσθενῆ καὶ ἀμυδρὰν ἀνάρροιαν ἴσχει πρὸς ἡμᾶς, διὰ τὴν κλάσιν ἐκλυομένης τῆς δυνάμεως."

17. Ὑπολαβὼν δ' ὁ Σύλλας "ἀμέλει ταῦτ'" F εἶπεν "ἔχει τινὰς πιθανότητας. ὃ δ' ἰσχυρότατόν ἐστι τῶν ἀντιπιπτόντων πότερον ἔτυχέ τινος παραμυθίας ἢ παρῆλθεν ἡμῶν τὸν ἑταῖρον;" "τί τοῦτο" ἔφη "λέγεις;" ὁ Λεύκιος "ἢ τὸ πρὸς τὴν διχότομον ἀπορούμενον;" "πάνυ μὲν οὖν" ὁ Σύλλας εἶπεν· "ἔχει γάρ τινα λόγον τὸ πάσης ἐν ἴσαις γωνίαις γιγνομένης ἀνακλάσεως, ὅταν ἡ σελήνη διχότομος

[1] Bernardakis ; vac. 4-E, 2-B. [2] E ; ἀμαυρωτέραν -B. [3] Xylander ; αὐτὴ -E, B.

[a] At 937 B *infra* and *De Pythiae Oraculis*, 404 D it is said that in being reflected from the moon the sun's rays lose their heat entirely (*cf.* Macrobius, *Somn. Scip.* i. 19. 12-13 [p. 560. 30 ff., Eyssenhardt]). Just above, however, at 929 A Plutarch ascribed to the moonlight a " feeble " heat, and so he does in *Quaest. Nat.* 918 A (*cf.* Aristotle, *De Part. Animal.* 680 a 33-34 ; [Aristotle], *Problemata*, 942 a 24-26 ; Theophrastus, *De Causis Plant.* iv. 14. 3). Kepler (*Somnium sive Astronomia Lunaris*, note 200) asserts that he had felt the heat from the rays of the full moon concentrated in a concave parabolic mirror ; but the first real evidence of the moon's heat was obtained by Melloni in 1846 by means of the newly invented thermopile. *Cf.* R. Pixis, *Kepler als Geograph*, p. 135 ; S. Günther, *Vergleichende Mond- und Erdkunde*,

the sun. That is why there is neither warmth [a] nor brilliance in it when it reaches us, as we should expect there to be if there had been a kindling or mixture of ⟨the⟩ lights ⟨of sun and moon⟩.[b] To the contrary, just as voices when they are reflected produce an echo which is fainter than the original sound and the impact of missiles after a ricochet is weaker,

> Thus, having struck the moon's broad disk, the ray [c]

comes to us in a refluence weak and faint because the deflection slackens its force."

17. Sulla then broke in and said : " No doubt this position has its plausible aspects ; but what tells most strongly on the other side, did our comrade [d] explain that away or did he fail to notice it ? " " What's that ? " said Lucius, " or do you mean the difficulty with respect to the half-moon ? " " Exactly," said Sulla, " for there is some reason in the contention that, since all reflection occurs at equal angles,[e] when-

p. 82, n. 3 ; Nasmyth-Carpenter, *The Moon* (London, 1885), p. 184.

[b] I have added the words " sun and moon " in the translation to make explicit the meaning of ⟨τῶν⟩ φώτων. For the theory referred to see note *h* on 929 c *supra*.

[c] = Empedocles, frag. B 43 (i, p. 330. 20 [Diels-Kranz]).

[d] See 929 B and note *a* on p. 48 *supra*.

[e] This expression is intended to have the same sense as πρὸς ἴσας γίγνεσθαι γωνίας ἀνάκλασιν πᾶσαν (930 A *infra*), and both of them mean (*pace* Raingeard, p. 100, and Kepler in note 28 to his translation) " the angle of reflection is always equal to the angle of incidence." *Cf.* [Euclid], *Catoptrica* a′ (= Euclid, *Opera Omnia*, vii, p. 286. 21-22 [Heiberg]) with Olympiodorus, *In Meteor.* p. 212. 7 = Hero Alexandrinus, *Opera*, ii. 1, p. 368. 5 (Nix-Schmidt) and [Ptolemy], *De Speculis*, ii = Hero Alexandrinus, *Opera*, ii. 1, p. 320. 12-13 (Nix-Schmidt) ; and contrast the more precise formulation of Philoponus, *In Meteor.* p. 27. 34-35.

(929) οὖσα[1] μεσουρανῇ, μὴ φέρεσθαι τὸ φῶς ἐπὶ γῆς ἀπ'
930 αὐτῆς ἀλλ' ὀλισθαίνειν ἐπέκεινα τῆς γῆς. ὁ γὰρ
ἥλιος ἐπὶ τοῦ ὁρίζοντος ὢν ἅπτεται τῇ ἀκτῖνι τῆς
σελήνης· διὸ καὶ κλασθεῖσα πρὸς ἴσας[2] ἐπὶ θάτερον
ἐκπεσεῖται πέρας καὶ οὐκ ἀφήσει δεῦρο τὴν αὐγὴν
ἢ διαστροφὴ μεγάλη καὶ παράλλαξις ἔσται τῆς
γωνίας, ὅπερ ἀδύνατόν ἐστιν." "ἀλλὰ νὴ Δί'"
εἶπεν ὁ Λεύκιος "καὶ τοῦτ' ἐρρήθη." καὶ πρός γε
Μενέλαον ἀποβλέψας ἐν τῷ διαλέγεσθαι τὸν μαθη-
ματικόν, "αἰσχύνομαι μὲν" ἔφη "σοῦ παρόντος,
ὦ φίλε Μενέλαε, θέσιν ἀναιρεῖν μαθηματικὴν ὥσπερ
θεμέλιον τοῖς κατοπτρικοῖς ὑποκειμένην πράγμασιν
ἀνάγκη δ' εἰπεῖν[3] ὅτι τὸ πρὸς ἴσας γίγνεσθαι[4]
γωνίας ἀνάκλασιν πᾶσαν οὔτε φαινόμενον αὐτόθεν
B οὔθ' ὁμολογούμενόν ἐστιν ἀλλὰ διαβάλλεται μὲν ἐπὶ
τῶν κυρτῶν κατόπτρων, ὅταν ἐμφάσεις ποιῇ μεί-
ζονας ἑαυτῶν πρὸς ἓν τὸ τῆς ὄψεως σημεῖον,
διαβάλλεται δὲ τοῖς διπτύχοις κατόπτροις, ὧν ἐπι-

[1] Wyttenbach ; διχοτομοῦσα -E, B.
[2] Benseler (*cf.* Cleomedes, p. 186. 18 [Ziegler]) : ἴσα -E, B.
[3] Wyttenbach ; εἶπεν -E, B.
[4] -Anon., Aldine, R.J. 94 ; τείνεσθαι -E, B.

[a] Kepler in note 19 to his translation points out that this is true only if μεσουρανῇ " is in mid-heaven " refers not to the meridian but to the great circle at right-angles to the ecliptic.

[b] Cleomedes, ii. 4. 103 (p. 186. 7-14 [Ziegler]) introduces as σχεδὸν γνώριμον his summary of this argument against the theory that moonlight is merely reflected sunlight.

[c] See note *e* on 929 F *supra*.

[d] It has been suggested that οὔθ' ὁμολογούμενον is a direct denial of ὡμολογημένον ἐστὶ παρὰ πᾶσιν at the beginning of Hero's demonstration (Schmidt in Hero Alexandrinus, *Opera* [ed. Nix-Schmidt], ii. 1, p. 314. However that may be, the law is assumed in Proposition XIX of Euclid's *Optics*, where

ever the moon at the half is in mid-heaven the light cannot move earthwards from her but must glance off beyond the earth. The ray that then touches the moon comes from the sun on the horizon [a] and therefore, being reflected at equal angles, would be produced to the point on the opposite horizon and would not shed its light upon us, or else there would be great distortion and aberration of the angle, which is impossible." [b] "Yes, by Heaven," said Lucius, "there was talk of this too"; and, looking at Menelaus the mathematician as he spoke, he said: "In your presence, my dear Menelaus, I am ashamed to confute a mathematical proposition, the foundation, as it were, on which rests the subject of catoptrics. Yet it must be said that the proposition, 'all reflection occurs at equal angles,' [c] is neither self-evident nor an admitted fact.[d] It is refuted in the case of convex [e] mirrors when the point of incidence of the visual ray produces images that are magnified in one respect; and it is refuted by folding mirrors,[f] either

it is said to have been stated in the *Catoptrics* (Euclid, *Opera Omnia*, vii, p. 30. 1-3 [Heiberg]); and a demonstration of it is ascribed to Archimedes (*Scholia in Catoptrica*, 7 = Euclid, *Opera Omnia*, vii, p. 348. 17-22 [Heiberg]; *cf.* Lejeune, *Isis*, xxxviii [1947], pp. 51 ff.). It is assumed by Aristotle in *Meteorology*, iii. 3-5 and possibly also by Plato (*cf.* Cornford, *Plato's Cosmology*, pp. 154 f. on *Timaeus*, 46 B): *cf.* also Lucretius, iv. 322-323 and [Aristotle], *Problemata*, 901 b 21-22 and 915 b 30-35. Proposition XIX of Euclid's *Optics*, referred to above, is supposed to be part of the "Dioptrics" of Euclid which Plutarch cites at *Non Posse Suaviter Vivi*, 1093 E (*cf.* Schmidt, *op. cit.* p. 304).

[e] *i.e. cylindrical*, not spherical, convex mirrors; *cf. Class. Phil.* xlvi (1951), pp. 142-143 for the construction and meaning of this sentence.

[f] For such mirrors *cf.* [Ptolemy], *De Speculis*, xii = Hero Alexandrinus, *Opera*, ii. 1, p. 342. 7 ff.

(930) κλιθέντων[1] πρὸς ἄλληλα καὶ γωνίας ἐντὸς γενομένης ἑκάτερον τῶν ἐπιπέδων διττὴν[2] ἔμφασιν ἀποδίδωσι καὶ ποιεῖ τέτταρας εἰκόνας ἀφ' ἑνὸς προσώπου, δύο μὲν ἀντιστρόφους ⟨ἐν⟩ τοῖς ἔξωθεν [ἀριστεροῖς][3] μέρεσι δύο δὲ δεξιοφανεῖς ἀμαυρὰς ἐν βάθει τῶν
C κατόπτρων. ὧν[4] τῆς γενέσεως τὴν αἰτίαν Πλάτων ἀποδίδωσιν. εἴρηκε γὰρ ὅτι τοῦ κατόπτρου ἔνθεν καὶ ἔνθεν ὕψος λαβόντος ὑπαλλάττουσιν αἱ ὄψεις τὴν ἀνάκλασιν ἀπὸ τῶν ἑτέρων ἐπὶ θάτερα μεταπίπτουσαι.[5] εἴπερ οὖν τῶν ὄψεων εὐθὺ[6] πρὸς ἡμᾶς ⟨αἱ μὲν ἀπὸ τῶν ἐπιπέδων⟩[7] ἀνατρέχουσιν αἱ δ' ἐπὶ θάτερα μέρη τῶν κατόπτρων ὀλισθαίνουσαι πάλιν ἐκεῖθεν ἀναφέρονται πρὸς ἡμᾶς, οὐ δυνατόν ἐστιν ἐν ἴσαις γωνίαις γίγνεσθαι πάσας ἀνακλάσεις, ὥστ'[8] ⟨ἔνιοι μὲν τοῖς μαθηματικοῖς⟩[9] ὁμόσε χωροῦντες ἀξιοῦσιν αὐτοῖς τοῖς ἀπὸ τῆς σελήνης ἐπὶ γῆν φερο-
D μένοις ῥεύμασι[10] τὴν ἰσότητα τῶν γωνιῶν ἀναιρεῖν, πολλῷ τοῦτ' ἐκείνου πιθανώτερον εἶναι νομίζοντες. οὐ μὴν ἀλλ' εἰ δεῖ τοῦτο χαρίζεσθαι τῇ πολλὰ δὴ

[1] Turnebus: ὡς ἐπικριθέντων -E, B.

[2] Turnebus: διττῆς -E, B.

[3] Emperius; τοῖς ἔξωθεν ἀριστεροῖς -E, B. For ἀριστεροῖς Schmidt (*Heronis Alexandrini Opera*, ii. 1, p. 313, n. 2) suggests σαφεστέρας, Raingeard ἐναργεστέρας, but it was more probably merely a gloss by someone who misunderstood δεξιοφανεῖς, as Amyot, Wyttenbach, and Prickard misunderstood it.

[4] Turnebus; between κατόπτρων and ὧν E and B repeat from above ὅταν ἐμφάσεις ποιῇ . . . διαβάλλεται δέ, after which E has a space of 13 letters and B of 10.

[5] H. C. (*cf. Timaeus*, 46 B 7: ὅταν μεταπέσῃ . . . φῶς, *i.e.* it is the *visual ray* that shifts); μεταπίπτουσαν -E, B.

[6] Papabasileios: εὐθὺς -E, B.

[7] H. C.; vac. 20-E, 15-B; ⟨αἱ μὲν ἐκ τῶν ἔξωθεν⟩ -Adler, *Zwei Beiträge*, p. 8.

plane of which, when they have been inclined to each other and have formed an inner angle, exhibits a double image, so that four likenesses of a single object are produced, two reversed on the outer surfaces and two dim ones not reversed in the depth of the mirrors. The reason for the production of these images Plato explains,[a] for he has said that when the mirror is elevated on both sides the visual rays interchange their reflection because they shift from one side to the other. So, if of the visual rays ⟨some⟩ revert straight to us ⟨from the plane surfaces⟩ while others glance off to the opposite sides of the mirrors and thence return to us again, it is not possible that all reflections occur at equal angles.[b] Consequently ⟨some people⟩ take direct issue ⟨with the mathematicians⟩ and maintain that they confute the equality of the angles of incidence and reflection by the very streams of light that flow from the moon upon the earth, for they deem this fact to be much more credible than that theory. Nevertheless, suppose that this [c] must be conceded as a favour to

[a] Plutarch means *Timaeus*, 46 B-C, where Plato, however, describes a concave, cylindrical mirror, not a folding plane mirror. Plutarch apparently mistook the words ἔνθεν καὶ ἔνθεν ὕψη λαβοῦσα, by which Plato describes the horizontal curvature of the mirror, to mean that the two planes of a folding mirror were raised to form an angle at the hinge which joined them.

[b] See note *e* on 929 F *supra*.

[c] *i.e.* the "theory" that the angle of reflection is always equal to the angle of incidence.

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[8] -Anon., Aldine, R.J. 94 ; ὅσας -E, B.

[9] H. C. (*cf. Class. Phil.* xlvi [1951], p. 143) ; no lacuna indicated in E, B.

[10] B ; ῥήμασι -E.

(930) *φίλῃ γεωμετρίᾳ καὶ δοῦναι, πρῶτον μὲν ἀπὸ τῶν ἠκριβωμένων ταῖς λειότησι συμπίπτειν ἐσόπτρων εἰκός ἐστιν ἡ δὲ σελήνη πολλὰς ἀνωμαλίας ἔχει καὶ τραχύτητας ὥστε τὰς αὐγὰς ἀπὸ σώματος μεγάλου προσφερομένας ὕψεσιν ἀξιολόγοις, ἀντιλάμψεις καὶ διαδόσεις ἀπ' ἀλλήλων λαμβάνουσιν, ἀνακλᾶσθαί τε παντοδαπῶς καὶ περιπλέκεσθαι καὶ συνάπτειν αὐτὴν ἑαυτῇ τὴν ἀνταύγειαν οἷον ἀπὸ πολλῶν φερο-*
E *μένην πρὸς ἡμᾶς κατόπτρων. ἔπειτα κἂν πρὸς αὐτῇ τῇ σελήνῃ τὰς ἀντανακλάσεις ἐν ἴσαις γωνίαις ποιῶμεν, οὐκ ἀδύνατον φερομένας ἐν διαστήματι τοσούτῳ τὰς αὐγὰς κλάσεις ἴσχειν καὶ περιολισθήσεις, ὡς συγχεῖσθαι*[1] *καὶ κάμπτειν*[2] *τὸ φῶς. ἔνιοι δὲ καὶ δεικνύουσι γράφοντες ὅτι πολλὰ τῶν φώτων ἐπὶ γῆν ἀφίησι κατὰ γραμμὴν ἀπὸ τῆς ἐκκεκλιμένης*[3] *ὑποταθεῖσαν*[4] *σκευωρεῖσθαι δ' ἅμα λέγοντι διάγραμμα, καὶ ταῦτα πρὸς πολλούς, οὐκ ἐνῆν.*

18. Τὸ δ' *ὅλον* " *ἔφη* " *θαυμάζω πῶς τὴν διχότομον ἐφ' ἡμᾶς κινοῦσιν ἐμπίπτουσαν μετὰ τῆς ἀμφικύρτου καὶ τῆς μηνοειδοῦς. εἰ γὰρ αἰθέριον*
F *ὄγκον ἢ πύρινον ὄντα τὸν τῆς σελήνης ἐφώτιζεν ὁ*

[1] Wyttenbach : *συγκεῖσθαι* -E, B.
[2] Emperius ; *λάμπειν* -E, B.
[3] H. C. : *ὑπὸ τὴν κεκλιμένην* -E, B.
[4] Turnebus : *ὑποταθείσης* -E, B.

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[a] With these words Plutarch means to refer to the effects of refraction : *cf. De Placitis*, 894 c = Aëtius, iii. 5. 5 (*Dox. Graeci*, p. 372. 21-26) ; Cleomedes, ii. 6. 124-125 (p. 224. 8-28 [Ziegler]) : Alexander, *In Meteor.* p. 143. 7-10.

[b] *Cf.* the argument given by Cleomedes, ii. 4. 103 (pp. 186. 14–188. 7 [Ziegler]) and especially : *ὅτι δ' ἀπὸ παντὸς τοῦ κύκλου αὐτῆς φωτίζεται ἡ γῆ, γνώριμον. εὐθέως γὰρ ἅμα τῷ τὴν πρώτην ἶτυν ἀνασχεῖν ἐκ τοῦ ὁρίζοντος φωτίζει τὴν γῆν, τούτων τῶν μερῶν*

geometry, the dearly beloved! In the first place, it is likely to occur only in mirrors that have been polished to exact smoothness; but the moon is very uneven and rugged, with the result that the rays from a large body striking against considerable heights which receive reflections and diffusions of light from one another are multifariously reflected and intertwined and the refulgence itself combines with itself, coming to us, as it were, from many mirrors. In the second place, even if we assume that the reflections on the surface of the moon occur at equal angles, it is not impossible that the rays as they travel through such a great interval get fractured and deflected [a] so as to be blurred and to bend their light. Some people even give a geometrical demonstration that the moon sheds many of her beams upon the earth along a line extended from the surface that is bent away from us [b]; but I could not construct a geometrical diagram while talking, and talking to many people too.

18. Speaking generally," he said, "I marvel that they adduce against us the moon's shining upon the earth at the half and at the gibbous and the crescent phases too.[c] After all, if the mass of the moon that is illuminated by the sun were ethereal or fiery, the

αὐτῆς περικλινῶν ὄντων καὶ πρὸς τὸν οὐρανόν, ἀλλ' οὐχί, μὰ Δία, πρὸς τὴν γῆν ὁρώντων. For *ἡ ἐκκεκλιμένη cf.* Hippocrates, *Art.* 38 (iv, p. 168. 18 [Littré]).

[c] *i.e.* the moon at the half, gibbous, and crescent phases presents such a great difficulty for the Stoics themselves that it is strange for them to adduce these phenomena as refutation of the theory that the moon shines by reflected light. Wyttenbach's conjecture, *ἐκπίπτουσαν* for *ἐμπίπτουσαν*, approved by Purser and apparently adopted by Prickard in his translation of 1918, betrays a misapprehension of the meaning of the text.

(930) ἥλιος, οὐκ ἂν ἀπέλειπεν αὐτῇ σκιερὸν ἀεὶ καὶ ἀλαμπὲς ἡμισφαίριον πρὸς αἴσθησιν ἀλλ', εἰ καὶ κατὰ μικρὸν ἔψαυε περιιών,[1] ὅλην[2] ἀναπίμπλασθαι καὶ δι' ὅλης τρέπεσθαι[3] τῷ φωτὶ πανταχόσε χωροῦντι δι' εὐπετείας ἦν προσῆκον. ὅπου γὰρ οἶνος ὕδατος θιγὼν κατὰ[4] πέρας καὶ σταγὼν αἵματος εἰς ὑγρὸν ἐμπεσόντος ἀνέχρωσε πᾶν ἅμα[5] ⟨τῷ ψαύειν⟩[6] φοινιχθὲν αὐτὸν δὲ τὸν ἀέρα λέγουσιν οὐκ ἀπορροαῖς[7] τισιν οὐδ' ἀκτῖσι μεμιγμέναις ἀλλὰ τροπῇ καὶ μεταβολῇ κατὰ νύξιν ἢ ψαῦσιν ἀπὸ τοῦ φωτὸς ἐξηλιοῦσθαι,[8] πῶς ἄστρον ἄστρου καὶ φῶς φωτὸς ἀψάμενον οἴονται μὴ κεράννυσθαι[9] μηδὲ σύγχυσιν ποιεῖν δι' ὅλου[10] καὶ μεταβολὴν ἀλλ' ἐκεῖνα φωτίζειν
931 μόνον ὧν ἅπτεται κατὰ τὴν ἐπιφάνειαν; ὃν γὰρ ὁ ἥλιος περιιὼν κύκλον ἄγει καὶ περιστρέφει περὶ[11] τὴν σελήνην, νῦν μὲν ἐπιπίπτοντα τῷ διορίζοντι τὸ ὁρατὸν αὐτῆς καὶ τὸ ἀόρατον νῦν δ' ἀνιστάμενον

[1] -Anon., Aldine, R.J. 94 ; περὶ ὧν -E, B ; περιών -Stephanus (1624) after Leonicus.
[2] Stephanus (1624) ; πολλὴν -E, B.
[3] Turnebus ; τρέφεσθαι -E, B.
[4] B ; ατὰ πέρας -E (at beginning of line).
[5] Turnebus ; αἷμα -E, B.
[6] Adler ; vac. 8-E, 7-B.
[7] Bernardakis ; ἀπορροίαις -E, B.
[8] E ; ἐξηλλοιοῦσθαι -B.
[9] E ; κεράννϋσθαι -B.
[10] E ; διόλου -B.
[11] E ; πρὸς -B.

[a] For ἀπέλειπεν *cf.* 931 c *infra.* The dative with the verb is unobjectionable, *cf. e.g.* [*Reg. et Imp. Apophthegm.*] 178 d, 195 f.

[b] For κατὰ πέρας *cf. De Communibus Notitiis*, 1080 e (= *S.V.F.* ii, frag. 487) : ψαύειν κατὰ πέρας τὰ σώματα . . . λέγουσι and *S.V.F.* ii, frag. 433 cited in note *d* on 930 f *infra.*

sun would not leave her [a] a hemisphere that to our perception is ever in shadow and unilluminated ; on the contrary, if as he revolves he grazed her ever so slightly, she should be saturated in her entirety and altered through and through by the light proceeding easily in all directions. Since wine that just touches water at its surface [b] or a drop of blood fallen into liquid at the moment ⟨of contact⟩ stains all the liquid red,[c] and since they say that the air itself is filled with sunshine not by having any effluences or rays commingled with it but by an alteration and change that results from impact or contact of the light,[d] how do they imagine that a star can come in contact with a star or light with light and instead of blending and producing a thorough mixture and change merely illuminate those portions of the surface which it touches ? [e] In fact, the circle which the sun in its revolution describes and causes to turn about the moon now coinciding with the circle that divides her visible and invisible parts and now standing at right

The " emendations " of Emperius and Papabasileios are consequently ill-advised.

[c] *Cf. De Communibus Notitiis*, 1078 D-E (=*S.V.F.* ii, frag. 480) and *S.V.F.* ii, frags. 473, 477, 479.

[d] *Cf. S.V.F.* ii, frag. 433 (Galen, *In Hippocr. Epidem. vi Comment.* iv, vol. xvii, B, p. 161 [Kühn], especially: τοῖς ἄνω πέρασιν αὐτοῦ (*scil.* τοῦ ἀέρος) προσπιπτούσης τῆς ἡλιακῆς αὐγῆς ὅλος ἀλλοιοῦταί τε καὶ μεταβάλλεται συνεχὴς ὢν ἑαυτῷ). *Cf.* also note *a* on 922 E *supra*.

[e] *Cf.* Cleomedes, ii. 4. 101 (p. 182. 20 ff. [Ziegler]) for the doctrine of Posidonius, which Plutarch here turns against him and the Stoics generally : τρίτη ἐστὶν αἵρεσις ἡ λέγουσα κιρνᾶσθαι αὐτῆς (*scil.* τῆς σελήνης) τὸ φῶς ἔκ τε τοῦ οἰκείου καὶ τοῦ ἡλιακοῦ φωτὸς καὶ τοιοῦτον γίνεσθαι οὐκ ἀπαθοῦς μενούσης αὐτῆς . . . ἀλλ' ἀλλοιουμένης ὑπὸ τοῦ ἡλιακοῦ φωτὸς καὶ κατὰ τοιαύτην τὴν κρᾶσιν ἴδιον ἰσχούσης τὸ φῶς. . . . *Cf. ibid.* 104 (p. 188. 4-7).

(931) πρὸς ὀρθὰς ὥστε τέμνειν ἐκεῖνον ὑπ' ἐκείνου τε τέμνεσθαι, ἄλλαις κλίσεσι καὶ σχέσεσι τοῦ λαμπροῦ πρὸς τὸ σκιερὸν ἀμφικύρτους καὶ μηνοειδεῖς[1] ἀποδιδόντα μορφὰς ἐν αὐτῇ, παντὸς μᾶλλον ἐπιδείκνυσιν[2] οὐ σύγκρασιν ἀλλ' ἐπαφὴν οὐδὲ σύλλαμψιν
B ἀλλὰ περίλαμψιν αὐτῆς ὄντα τὸν φωτισμόν. ἐπεὶ δ' οὐκ αὐτὴ φωτίζεται μόνον ἀλλὰ καὶ δεῦρο τῆς αὐγῆς ἀναπέμπει τὸ εἴδωλον, ἔτι καὶ μᾶλλον ἰσχυρίσασθαι τῷ λόγῳ περὶ τῆς οὐσίας δίδωσιν. αἱ γὰρ ἀνακλάσεις γίγνονται πρὸς οὐδὲν ἀραιὸν οὐδὲ λεπτομερές, οὐδ' ἔστι φῶς ἀπὸ φωτὸς[3] ἢ πῦρ ἀπὸ πυρὸς ἀφαλλόμενον [ἢ][4] νοῆσαι ῥᾴδιον, ἀλλὰ δεῖ τὸ ποιῆσον ἀντιτυπίαν τινὰ καὶ κλάσιν ἐμβριθὲς εἶναι καὶ πυκνὸν ἵνα πρὸς αὐτὸ πληγὴ καὶ ἀπ' αὐτοῦ φορὰ γένηται. τὸν γοῦν αὐτὸν ἥλιον ὁ μὲν ἀὴρ διίησιν οὐ παρέχων ἀνακοπὰς οὐδ' ἀντερείδων ἀπὸ δὲ ξύλων καὶ λίθων καὶ ἱματίων εἰς φῶς τιθεμένων
C πολλὰς ἀντιλάμψεις καὶ περιλάμψεις ἀποδίδωσιν. οὕτω δὲ καὶ τὴν γῆν ὁρῶμεν ὑπ' αὐτοῦ φωτιζομένην· οὐ γὰρ εἰς βάθος ὥσπερ ὕδωρ οὐδὲ δι' ὅλης ὥσπερ ἀὴρ διίησι τὴν αὐγήν, ἀλλ' οἷος τὴν σελήνην περιστείχει κύκλος αὐτοῦ[5] καὶ ὅσον ὑποτέμνεται μέρος ἐκείνης τοιοῦτος ἕτερος περίεισι τὴν γῆν καὶ τοσοῦτον[6] φωτίζων ἀεὶ καὶ ἀπολείπων ἕτερον ἀφώ-

[1] B ; νοειδεῖς -E (at top of page).
[2] -Anon., Aldine, R.J. 94 ; ἐπιδεικνύουσιν -E, B.
[3] E ; ἀποφωτός -B.
[4] Deleted by Wyttenbach.
[5] -Anon., Aldine, R.J. 94 ; αὐτῶν -E, B ; αὐτὴν -Turnebus, Vulcobius.
[6] E ; τοσοῦτο -B.

[a] *Cf.* Cleomedes, ii. 5. 109-111 (pp. 196. 28–200. 23 [Ziegler]).

angles to it so as to intersect it and be intersected by it, by different inclinations and relations of the bright part to the dark producing in her the gibbous and crescent phases,[a] conclusively demonstrates that her illumination is the result not of combination but of contact, not of a concentration of light within her but of light shining upon her from without. In that she is not only illuminated herself, however, but also transmits to us the semblance of her illumination, she gives us all the more confidence in our theory of her substance. There are no reflections from anything rarefied or tenuous in texture, and it is not easy even to imagine light rebounding from light or fire from fire; but whatever is to cause a repercussion or a reflection must be compact and solid,[b] in order that it may stop a blow and repel it.[c] At any rate, the same sunlight that the air lets pass without impediment or resistance is widely reflected and diffused from wood and stone and clothing exposed to its rays. The earth too we see illuminated by the sun in this fashion. It does not let the light penetrate its depths as water does or pervade it through and through as air does: but such as is the circle of the sun that moves around the moon and so great as is the part of her that it intercepts, just such a circle in turn moves around the earth, always illuminating just so much and leaving another part unilluminated,[d] for

[b] Here ἐμβριθές is used as the opposite of λεπτομερές (*cf.* Liddell and Scott, *s.v.* ἐμβρίθεια ii) as πυκνόν is of ἀραιόν.

[c] *Cf.* Cleomedes, ii. 4. 101-102 (p. 184. 9-18 [Ziegler]). Cleomedes, assuming that the moon is μανόν, uses this as an argument against reflection: Plutarch, having established the necessity of reflection, uses the argument to support the contention that the moon is earthy.

[d] *Cf.* Cleomedes, ii. 5. 108 (p. 194. 20 ff. [Ziegler]).

(931) τιστον· ἡμισφαιρίου γὰρ ὀλίγῳ δοκεῖ μεῖζον εἶναι τὸ περιλαμπόμενον ἑκατέρας. δότε δή μοι γεωμετρικῶς εἰπεῖν πρὸς ἀναλογίαν ὡς εἰ, τριῶν ὄντων οἷς τὸ ἀφ' ἡλίου φῶς πλησιάζει, γῆς σελήνης ἀέρος, ὁρῶμεν οὐχ ὡς ὁ ἀὴρ μᾶλλον ἢ[1] ὡς ἡ γῆ φωτιζομένην τὴν σελήνην, ἀνάγκη φύσιν ἔχειν ὁμοίαν ἃ ταὐτὰ πάσχειν ὑπὸ ταὐτοῦ πέφυκεν."

D 19. Ἐπεὶ δὲ πάντες ἐπῄνεσαν τὸν Λεύκιον, "εὖ γ'" ἔφην "ὅτι καλῷ λόγῳ καλὴν ἀναλογίαν προσέθηκας· οὐ γὰρ ἀποστερητέον σε τῶν ἰδίων." κἀκεῖνος ἐπιμειδιάσας "οὐκοῦν" ἔφη "καὶ δεύτερον ἀναλογίᾳ προσχρηστέον, ὅπως μὴ ⟨τῷ⟩[2] ταὐτὰ πάσχειν ὑπὸ ταὐτοῦ μόνον ἀλλὰ καὶ τῷ ταὐτὰ ποιεῖν ταὐτὸν ἀποδείξωμεν τῇ γῇ τὴν σελήνην προσεοικυῖαν. ὅτι μὲν γὰρ οὐδὲν οὕτως τῶν περὶ τὸν ἥλιον γιγνομένων ὅμοιόν ἐστιν ὡς ἔκλειψις ἡλίου δύσει δότε μοι, ταύτης ἔναγχος τῆς[3] συνόδου E μνησθέντες ἣ πολλὰ μὲν ἄστρα πολλαχόθεν τοῦ οὐρανοῦ διέφηνεν εὐθὺς ἐκ μεσημβρίας ἀρξαμένη κρᾶσιν δ' οἵαν τὸ λυκαυγὲς τῷ ἀέρι παρέσχεν· εἰ δὲ μή, Θέων[4] ἡμῖν οὗτος ⟨τὸν⟩[5] Μίμνερμον ἐπάξει καὶ

[1] δὲ -Wyttenbach. [2] Basiliensis ; lacking in E, B.
[3] B ; lacking in E. [4] Basiliensis ; θεῶν -E, B.
[5] Stephanus (1624) ; Μίμνερμον -Basiliensis ; ἐργομίμναμον -E, B.

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[a] *Cf.* Cleomedes, ii. 5. 109 (p. 198. 6-9 [Ziegler]).

[b] I have tried to preserve the contorted form in which Plutarch expresses the point that the moon, since it is affected by sunlight as the earth is and not as air is, must have the consistency of earth and not of air.

[c] Concerning this eclipse see the Introduction, § 3 *supra* on the date of the dialogue.

[d] For λυκαυγές see 941 D *infra* and Lucian, *Vera Hist.* ii. 12. Prickard takes the κρᾶσις to refer to the degree of heat ;

the illuminated portion of either body appears to be slightly greater than a hemisphere.[a] Give me leave then to put it in geometrical fashion in terms of a proportion. Given three things approached by the light from the sun: earth, moon air; if we see that the moon is illuminated not as the air is rather than as the earth, the things upon which the same agent produces the same effects must be of a similar nature." [b]

19. When all had applauded Lucius, I said: "Congratulations upon having added to an elegant account an elegant proportion, for you must not be defrauded of what belongs to you." He smiled thereat and said: "Well then proportion must be used a second time, in order that we may prove the moon to be like the earth not only because the effects of the same agent are the same on both but also because the effects of both on the same patient are the same. Now, grant me that nothing that happens to the sun is so like its setting as a solar eclipse. You will if you call to mind this conjunction recently which, beginning just after noonday, made many stars shine out from many parts of the sky [c] and tempered the air in the manner of twilight.[d] If you do not recall it, Theon here will cite us Mimnermus [e] and Cydias [f] and

Raingeard, like Amyot and Wyttenbach, takes it to refer to colour or light. Either is possible, but I think a reference to colour the more probable: for κρᾶσις used of colour *cf. Quaest. Convir.* 647 c.

[e] *Cf. Anthologia Lyrica Graeca*, ed. Diehl², i. 1, pp. 50-57, and Edmonds, *Elegy and Iambus*, i, pp. 82-103; Mimnermus is mentioned in the pseudo-Plutarchean *De Musica*, chap. 8, 1133 F.

[f] *Cf.* Plato, *Charmides*, 155 D; Edmonds, *Lyra Graeca*, iii, p. 68; Wilamowitz, *Textgeschichte der griechischen Lyriker*, p. 40, n. 1.

(931) τὸν Κυδίαν καὶ τὸν Ἀρχίλοχον πρὸς δὲ τούτοις τὸν Στησίχορον καὶ τὸν Πίνδαρον ἐν ταῖς ἐκλείψεσιν ὀλοφυρομένους ' ἄστρον[1] φανερώτατον κλεπτόμενον ' καί ' μέσῳ ἄματι[2] νύκτα γινομένην ' καὶ τὴν
F ἀκτῖνα τοῦ ἡλίου ' σκότους[3] ἀτραπὸν ⟨ἐσσυμέναν⟩ '[4] φάσκοντας ἐπὶ πᾶσι δὲ τὸν Ὅμηρον ' νυκτὶ καὶ ζόφῳ τὰ πρόσωπα[5] κατέχεσθαι τῶν ἀνθρώπων ' λέγοντα καὶ ' τὸν ἥλιον ἐξαπολωλέναι τοῦ οὐρανοῦ ' περὶ τὴν σελήνην καὶ ⟨αἰνιττόμενον ὡς⟩[6] τοῦτο γίγνεσθαι πέφυκε ' τοῦ μὲν φθίνοντος μηνὸς τοῦ δ' ἱσταμένου.' τὰ λοιπὰ δ' οἶμαι ταῖς μαθηματικαῖς ἀκριβείαις εἰς τὸν ⟨σαφῆ λόγον⟩[7] ἐξῆχθαι καὶ βέβαιον ὡς ἥ γε νύξ ἐστι σκιὰ γῆς ἡ δ' ἔκλειψις τοῦ ἡλίου σκιὰ σελήνης ὅταν ἡ ὄψις ἐν αὐτῇ γένηται. δυόμενος γὰρ ὑπὸ τῆς γῆς ἀντιφράττεται πρὸς τὴν ὄψιν ἐκλιπὼν δ' ὑπὸ τῆς σελήνης· ἀμφότεραι δ'
932 εἰσὶν ἐπισκοτήσεις, ἀλλ' ἡ μὲν δυτικὴ τῆς γῆς ἡ δ' ἐκλειπτικὴ τῆς σελήνης τῇ σκιᾷ καταλαμβανούσης

[1] Bergk ; τὸν -E, B.
[2] Leonicus ; ἅμα τὴν -E, B.
[3] B ; σκότος -E.
[4] Adler ; vac. 16 -E, B.
[5] Xylander ; πρῶτα -E, B.
[6] H. C. (*cf. De Vita et Poesi Homeri*, § 4 [vii, p. 332. 9, Bernardakis]) ; vac. 14-E, 12-B.
[7] H. C. (*cf. Class. Phil.* xlvi [1951], pp. 143 f.) : vac. 7-E, 9-B.

[a] *Cf.* Archilochus, frag. 74 (*Anthologia Lyrica Graeca*, ed. Diehl², i. 3, p. 33 = Edmonds, *Elegy and Iambus*, ii, p. 134).

[b] *Cf.* Pliny, *Nat. Hist.* ii. 12, § 54 : " quo in metu fuisse Stesichori et Pindari vatum sublimia ora palam est deliquio solis."

[c] = Pindar, *Paean*, ix. 2-3 : ἄστρον ὑπέρτατον ἐν ἀμέρᾳ κλεπτόμενον.

[d] Possibly Stesichorus, *cf.* Bergk, *Poetae Lyrici Graeci*⁴, iii, p. 229 (frag. 73), and Edmonds, *Elegy and Iambus*, i, p. 102, n. 1.

Archilochus [a] and Stesichorus besides and Pindar,[b] who during eclipses bewail 'the brightest star bereft' [c] and 'at midday night falling' [d] and say that the beam of the sun '⟨is sped⟩ the path of shade' [e]: and to crown all he will cite Homer, who says 'the faces of men are covered with night and gloom' [f] and 'the sun has perished out of heaven' [g] speaking with reference to the moon and ⟨hinting that⟩ this naturally occurs

When waning month to waxing month gives way.[h]

For the rest, I think that it has been reduced by the precision of mathematics to the ⟨clear⟩ and certain ⟨formula⟩ that night is the shadow of earth [i] and the eclipse of the sun is the shadow of the moon [j] whenever the visual ray encounters it. The fact is that in setting the sun is screened from our vision by the earth and in eclipse by the moon; both are cases of occultation, but the vespertine is occultation by the earth and the ecliptic by the moon with her shadow

[e] *Cf.* Pindar, *Paean*, ix. 5: ἐπίσκοτον ἀτραπὸν ἐσσυμένα. For the genitive σκότους *cf. De Audiendis Poetis*, 36 E, and *De Latenter Vivendo*, 1130 B.

[f] Adapted from *Odyssey*, xx. 351-352.

[g] *Odyssey*, xx. 356-357.

[h] *Odyssey*, xix. 307. For this interpretation of the Homeric lines *cf. De Vita et Poesi Homeri*, chap. 108 (vii, p. 388. 15 ff. [Bernardakis]), and Heraclitus, *Quaestiones Homericae*, § 75 (pp. 98. 20–99. 18 [Oelmann]).

[i] *Cf. De Primo Frigido*, 953 A and *Plat. Quaest.* 1006 F, where on *Timaeus*, 40 C Plutarch quotes Empedocles to this effect. Aristotle refers to the definition, *Topics*, 146 b 28 and *Meteorology*, 345 b 7-8.

[j] *Cf.* the lines of Empedocles quoted at 929 C-D *supra*. In *De Placitis*, 890 F = Aëtius, ii. 24. 1 this explanation of solar eclipses is ascribed to Thales—quite unhistorically, as the subsequent entries show.

(932) τὴν ὄψιν. ἐκ δὲ τούτων εὐθεώρητον τὸ γιγνόμενον. εἰ γὰρ ὅμοιον τὸ πάθος, ὅμοια τὰ ποιοῦντα· τῷ γὰρ αὐτῷ ταὐτὰ συμβαίνειν ὑπὸ τῶν αὐτῶν ἀναγκαῖόν ἐστιν. εἰ δ' οὐχ οὕτως[1] τὸ περὶ τὰς ἐκλείψεις σκότος βύθιόν ἐστιν οὐδ' ὁμοίως τῇ νυκτὶ πιέζει τὸν ἀέρα, μὴ θαυμάζωμεν· οὐσία μὲν γὰρ ἡ αὐτὴ τοῦ τὴν νύκτα ποιοῦντος καὶ τοῦ τὴν ἔκλειψιν σώματος μέγεθος δ' οὐκ ἴσον, ἀλλ' Αἰγυπτίους μὲν ἑβδομηκοστόδυον οἶμαι φάναι μόριον εἶναι[2] τὴν σελήνην
B 'Αναξαγόραν δ' ὅση Πελοπόννησος.[3] 'Αρίσταρχος δὲ ⟨τὴν διάμετρον τῆς γῆς πρὸς⟩[4] τὴν διάμετρον τῆς σελήνης λόγον ἔχουσαν ἀποδείκνυσιν ὃς ἐλάττων μὲν ἢ ἑξήκοντα πρὸς δεκαεννέα[5] μείζων δ' ἢ ὡς[6] ἑκατὸν ὀκτὼ πρὸς τεσσαράκοντα τρί' ἐστίν. ὅθεν ἡ μὲν γῆ παντάπασι τῆς ὄψεως τὸν ἥλιον ἀφαιρεῖται διὰ μέγεθος (μεγάλη γὰρ ἡ ἐπιπρόσθησις καὶ χρόνον ἔχουσα τὸν τῆς νυκτός), ἡ δὲ σελήνη κἂν ὅλον ποτὲ κρύψῃ τὸν ἥλιον, οὐκ ἔχει χρόνον οὐδὲ πλάτος ἡ ἔκλειψις ἀλλὰ περιφαίνεταί τις αὐγὴ περὶ τὴν ἴτυν οὐκ ἐῶσα βαθεῖαν γενέσθαι τὴν σκιὰν καὶ ἄκρατον. 'Αριστοτέλης δ' ὁ παλαιὸς
C αἰτίαν τοῦ πλεονάκις τὴν σελήνην ἐκλείπουσαν ἢ

[1] E : οὕτω -B.
[2] ⟨τῆς γῆς⟩ -Turnebus, Vulcobius.
[3] B : Πελοπόνησος -E.
[4] Bernardakis (*cf.* *Aristarchus*, p. 408. 21 [Heath]).
[5] Turnebus (*cf.* Stephanus [1624]) : δέ, καὶ ἐννέα -E, B, Aldine, Basiliensis.
[6] Bernardakis : δέ πως -E, B.

[a] *Cf.* Cleomedes, ii. 3. 94-95 (p. 172. 6-10 [Ziegler]) and ii. 4. 106 (p. 192. 16-24) ; Geminus, x (pp. 130. 11–132. 12 [Manitius]).

[b] I know of no other reference to such an estimate.

[c] According to Hippolytus, *Refut.* i. 8. 6-10 (=*Dox. Graeci*, p. 562=Anaxagoras, frag. A 42 [ii, p. 16. 16-31,

intercepting the visual ray.[a] What follows from this is easy to perceive. If the effect is similar, the agents are similar, for it must be the same agents that cause the same things to happen to the same subject. Nor should we marvel if the darkness of eclipses is not so deep or so oppressive of the air as night is. The reason is that the body which produces night and that which produces the eclipse while the same in substance are not equal in size. In fact the Egyptians, I think, say that the moon is one seventy-second part (of the earth),[b] and Anaxagoras that it is the size of the Peloponnesus[c]; and Aristarchus demonstrates that the ratio of ⟨the earth's diameter to⟩ the diameter of the moon is smaller than 60 to 19 and greater than 108 to 43.[d] Consequently the earth because of its size removes the sun from sight entirely, for the obstruction is large and its duration is that of the night. Even if the moon, however, does sometimes cover the sun entirely, the eclipse does not have duration or extension; but a kind of light is visible about the rim which keeps the shadow from being profound and absolute.[e] The ancient Aristotle gives this as a reason besides some others why the moon

Diels-Kranz]), Anaxagoras said that the sun exceeds the Peloponnesus in size (*cf.* Aëtius, ii. 21. 3 and Diogenes Laertius, ii. 8). The statement here concerning the moon is missing from Diels-Kranz.

[d] This is Proposition 17 of Aristarchus's essay, "On the Sizes and Distances of the Sun and Moon" (*cf.* Heath's edition and translation in his *Aristarchus of Samos*, pp. 351 ff.). Although Plutarch does not say that this contradicts Stoic doctrine, the older, orthodox Stoics held that the moon as well as the sun is larger than the earth (*De Placitis*, 891 c = Aëtius, ii. 26. 1 = *S. V.F.* ii, frag. 666; *cf.* Pliny, *Nat. Hist.* ii. 11 [8]. 49).

[e] *Cf.* Cleomedes, ii. 4. 105 (p. 190. 17-26).

(932) τὸν ἥλιον καθορᾶσθαι πρὸς ἄλλαις τισὶ καὶ ταύτην ἀποδίδωσιν· ἥλιον γὰρ ἐκλείπειν σελήνης ἀντιφράξει σελήνην δὲ ⟨γῆς, πολλῷ μείζονος οὔσης.⟩[1] ὁ δὲ Ποσειδώνιος ὁρισάμενος οὕτως· 'τόδε τὸ πάθος ἔκλειψίς ἐστιν ἡλίου· σύνοδος σκιᾶς σελήνης οἷς[2] [τὴν ἔκλειψιν][3] ⟨ἂν γῆς μέρεσι κατασκιάζῃ·⟩[4] ἐκείνοις γὰρ μόνοις ἔκλειψίς ἐστιν ὧν ἂν ἡ σκιὰ τῆς σελήνης καταλαβοῦσα τὴν ὄψιν ἀντιφράξῃ[5] πρὸς τὸν ἥλιον'· ὁμολογῶν δὴ[6] σκιὰν τῆς σελήνης φέρεσθαι πρὸς ἡμᾶς, οὐκ οἶδ' ὅτι λέγειν ἑαυτῷ καταλέλοιπεν. ἄστρου δὲ σκιὰν ἀδύνατον γενέσθαι· τὸ γὰρ ἀφώτιστον σκιὰ λέγεται τὸ δὲ φῶς οὐ ποιεῖ[7] σκιὰν ἀλλ' ἀναιρεῖν πέφυκεν.

D 20. "Ἀλλὰ δὴ τί"[8] ἔφη "μετὰ τοῦτο τῶν τεκμηρίων ἐλέχθη;" κἀγὼ "τὴν αὐτὴν" ἔφην "ἐλάμβανεν ἡ σελήνη ἔκλειψιν." "ὀρθῶς" εἶπεν "ὑπέμνησας.[9] ἀλλὰ δὴ πότερον ὡς πεπεισμένων[10] ὑμῶν καὶ τιθέντων ἐκλείπειν τὴν σελήνην ὑπὸ τοῦ σκιάσματος ἁλισκομένην ἤδη τρέπωμαι[11] πρὸς τὸν

[1] Adler; σελήνην δὲ vac. 28-E (in two lines), 25-B.
[2] E; ἧς -B.
[3] Excised by Prickard (1911).
[4] H. C.; vac. 22-E, 11-B.
[5] Anon., Aldine, R.J. 94; ἀντιφράξαι -E, B.
[6] H. C.; δὲ -E, B: γε -Wyttenbach.
[7] E: ποιεῖν -B.
[8] E: τί δὴ -B.
[9] B: ὑπόμνησας -E.
[10] E; πεποιημένων -B.
[11] Wyttenbach; τρέπονται -E, B.

[a] = Aristotle, frag. 210 (Rose). The reference is not to *De Caelo*, 293 b 20-25, for in that passage Aristotle gives not his own opinion but that of some Pythagoreans (*cf.* Cherniss,

is observed in eclipse more frequently than the sun, saying that the sun is eclipsed by interposition of the moon but the moon ⟨by that of the earth, which is much larger⟩.[a] Posidonius gave this definition : 'The following condition is an eclipse of the sun, conjunction of the moon's shadow with whatever ⟨parts of the earth it may obscure⟩, for there is an eclipse only for those whose visual ray the shadow of the moon intercepts and screens from the sun '[b] ;—since he concedes then that a shadow of the moon falls upon us, he has left himself nothing to say that I can see. Of a star there can be no shadow, for shadow means the unlighted and light does not produce shadow but naturally destroys it.[c]

20. Well now," he said, " which of the proofs came after this ? " And I replied, " That the moon is subject to the same eclipse." " Thank you," he said, " for reminding me ; but now shall I assume that you have been persuaded and do hold the moon to be eclipsed by being caught in the shadow and so

Aristotle's Criticism of Presocratic Philosophy, pp. 198-199, and Aëtius, ii. 29. 4 cited there). For the terminology σελήνης or γῆς ἀντίφραξις *cf.* Aristotle, *Anal. Post.* 90 a 15-18, and with the whole passage *cf.* Pseudo-Alexander, *Problem.* 2. 46 (quoted by Rose, *Aristoteles Pseudepigraphus*, § 194, p. 222), and Philoponus, *In Meteor.* p. 15. 21-23.

[b] *Cf.* Cleomedes, ii. 3. 94-95 (p. 172. 6-17 [Ziegler]) and 98 (p. 178. 13-24), ii. 4. 106 (p. 192. 14-20).

[c] Posidonius ranked the moon as a " star " : *cf.* Arius Didymus, *Epitome*, frag. 32 (*Dox. Graeci*, p. 466. 18-21), and Edelstein, *A.J.P.* lvii (1936), p. 297. For the theory that the light of the moon is a product of her own proper light and the solar light which produces an alteration in her *cf.* Cleomedes, ii. 4. 101 (pp. 182. 20–184. 3 [Ziegler]) and 104 (p. 188. 5-27), the latter of which indicates how the present contention of Plutarch could have been answered from the point of view of Posidonius.

(932) λόγον ἢ βούλεσθε μελέτην ποιήσωμαι[1] καὶ ἀπόδειξιν ὑμῖν[2] τῶν ἐπιχειρημάτων ἕκαστον ἀπαριθμήσας;" "νὴ Δί'" εἶπεν ὁ Θέων "τούτοις ἐμμελέτησον. ἐγὼ δὲ καὶ πειθοῦς τινος δέομαι ταύτῃ μόνον ἀκηκοὼς ὡς ἐπὶ μίαν [μὲν][3] εὐθεῖαν
E τῶν τριῶν σωμάτων γιγνομένων, γῆς καὶ ἡλίου καὶ σελήνης, αἱ ἐκλείψεις συντυγχάνουσιν· ἡ γὰρ γῆ τῆς σελήνης ἢ πάλιν ἡ σελήνη τῆς γῆς ἀφαιρεῖται τὸν ἥλιον· ἐκλείπει γὰρ οὗτος μὲν σελήνης σελήνη δὲ γῆς ἐν μέσῳ τῶν τριῶν ἱσταμένης· ὧν γίγνεται τὸ μὲν ἐν συνόδῳ τὸ δ' ἐν διχομηνίᾳ." καὶ ὁ Λεύκιος ἔφη "σχεδὸν μέντοι[4] τῶν λεγομένων κυριώτατα ταῦτ' ἐστί. πρόσλαβε[5] δὲ πρῶτον, εἰ βούλει, τὸν ἀπὸ τοῦ σχήματος τῆς σκιᾶς λόγον. ἔστι γὰρ κῶνος[6] ἅτε δὴ[7] μεγάλου πυρὸς ἢ φωτὸς σφαιροειδοῦς ἐλάττονα σφαιροειδῆ δὲ περιβάλλοντος ὄγκον. ὅθεν ἐν ταῖς ἐκλείψεσι τῆς σελήνης αἱ περιγραφαὶ τῶν μελαινομένων πρὸς τὰ λαμπρὰ τὰς ἀποτομὰς περιφερεῖς ἴσχουσιν· ἃς γὰρ ἂν στρογ-
F γύλον στρογγύλῳ προσμῖξαν ἢ δέξηται τομὰς ἢ παράσχῃ, πανταχόσε χωροῦσαι δι' ὁμοιότητα, γίγνονται κυκλοτερεῖς. δεύτερον οἶμαί σε γιγνώσκειν

[1] E, B[1]; ποιήσωμεν -B[2].
[2] Aldine, Basiliensis; ὑμῶν -E, B.
[3] Deleted by Wyttenbach.
[4] B; μέν τι -E.
[5] -Anon., Aldine, R.J. 94, Wyttenbach; πρόλαβε -E, B.
[6] Xylander; κοινός -E, B.
[7] H. C.; μὴ -E, B; καὶ -Aldine, Basiliensis.

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[a] The argument that the moon is earthy, which at the beginning of chap. 19 (931 D) Lucius stated in the form of a proportion.

[b] *Cf.* Cleomedes, ii. 6. 115 (p. 208. 9-12 [Ziegler]) for the

turn straightway to my argument,[a] or do you prefer that I give you a lecture and demonstration in which each of the arguments is ennumerated ? " "By heaven," said Theon, "do give these gentlemen a lecture. As for me, I want some persuasion as well, since I have only heard it put this way : when the three bodies, earth and sun and moon, get into a straight line, eclipses take place because the earth deprives the moon or the moon, on the other hand, deprives the earth of the sun, the sun being eclipsed when the moon and the moon when the earth takes the middle position of the three, the former of which cases occurs at conjunction and the latter at the middle of the month." [b] Whereupon Lucius said, "Those are roughly the main points, though, of what is said on the subject. Add thereto first, if you will, the argument from the shape of the shadow. It is a cone, as is natural when a large fire or light that is spherical circumfuses a smaller but spherical mass.[c] This is the reason why in eclipses of the moon the darkened parts are outlined against the bright in segments that are curved,[d] for whenever two round bodies come into contact the lines by which either intersects the other turn out to be circular since they have everywhere a uniform tendency.[e] Secondly,

eclipse of the moon and ii. 4. 106 (p. 192. 14-20) for the eclipse of the sun ; *cf.* also Theon of Smyrna, p. 193. 23 ff. and p. 197. 22 ff. (Hiller) ; Geminus, viii. 14 (p. 104. 23 ff. [Manitius]).

[c] See notes *a* and *b* on 923 B *supra*.

[d] *Cf.* Cleomedes, ii. 6. 118 (p. 214. 2-12 [Ziegler]) ; Aristotle, *De Caelo*, 297 b 23-30.

[e] *i.e.* the intersecting lines are always arcs of a circle because the degree of curvature of each of the two surfaces is at every point similar. For this interpretation *cf. Class. Phil.* xlvi (1951), p. 144.

(932) ὅτι σελήνης μὲν ἐκλείπει πρῶτα μέρη τὰ πρὸς ἀπηλιώτην ἡλίου δὲ τὰ πρὸς δύσιν, κινεῖται δ' ἡ μὲν σκιὰ τῆς γῆς ἐπὶ τὴν ἑσπέραν ἀπὸ τῶν ἀνα-
933 τολῶν ἥλιος δὲ καὶ σελήνη τοὐναντίον ἐπὶ τὰς ἀνατολάς. ταῦτα γὰρ ἰδεῖν τε παρέχει τῇ αἰσθήσει τὰ φαινόμενα κἀκ λόγων οὐ πάνυ τι[1] μακρῶν μαθεῖν ἔστιν. ἐκ δὲ τούτων ἡ αἰτία βεβαιοῦται τῆς ἐκλείψεως. ἐπεὶ γὰρ ἥλιος μὲν ἐκλείπει καταλαμβανόμενος σελήνη δ' ἀπαντῶσα τῷ ποιοῦντι τὴν ἔκλειψιν, εἰκότως μᾶλλον δ' ἀναγκαίως ὁ μὲν[2] ὄπισθεν ἁλίσκεται πρῶτον ἡ δ' ἔμπροσθεν· ἄρχεται γὰρ ἐκεῖθεν ἡ ἐπιπρόσθησις ὅθεν πρῶτον [μὲν][3] ἐπιβάλλει τὸ ἐπιπροσθοῦν· ἐπιβάλλει δ' ἐκείνῳ μὲν ἀφ' ἑσπέρας ἡ σελήνη πρὸς αὐτὸν ἁμιλλωμένη ταύτῃ δ' ἀπὸ τῶν ἀνατολῶν ⟨ἡ σκιὰ τῆς γῆς⟩[4] ὡς πρὸς τοὐναντίον ὑποφερομένη. τρίτον τοίνυν ἔτι
B τὸ τοῦ χρόνου λάβε[5] καὶ τὸ τοῦ μεγέθους τῶν ἐκλείψεων αὐτῆς. ὑψηλὴ μὲν ἐκλείπουσα καὶ ἀπόγειος ὀλίγον ἀποκρύπτεται[6] χρόνον πρόσγειος δὲ καὶ ταπεινὴ αὐτὸ τοῦτο[7] παθοῦσα σφόδρα πιέζεται καὶ βραδέως ἐκ τῆς σκιᾶς ἄπεισι, καίτοι ταπεινὴ μὲν οὖσα τοῖς μεγίστοις χρῆται κινήμασιν ὑψηλὴ δὲ τοῖς ἐλαχίστοις. ἀλλὰ τὸ αἴτιον ἐν τῇ σκιᾷ τῆς διαφορᾶς ἐστιν· εὐρυτάτη γὰρ οὖσα περὶ τὴν βάσιν, ὥσπερ οἱ κῶνοι, συστελλομένη τε κατὰ μικρὸν εἰς ὀξὺ τῇ κορυφῇ καὶ λεπτὸν ἀπολήγει πέρας. ὅθεν ἡ σελήνη ταπεινὴ μὲν ἐμπεσοῦσα τοῖς μεγίστοις

[1] E: τοι -B. [2] Wyttenbach: τὸ μὲν -E, B.
[3] Deleted by Wyttenbach. [4] Adler; no lacuna -E, B.
[5] E: omitted by B. [6] E, B[2]; ἀπολείπεται -B[1].
[7] E, B: ταὐτὸ τοῦτο -Benseler (" le mesme " -Amyot).

[a] *Cf. Class. Phil.* xlvi (1951), p. 144; Cleomedes, ii. 6. 116

I think that you are aware that of the moon the eastward parts are first eclipsed and of the sun the westward parts and that, while the shadow of the earth moves from east to west, the sun and the moon move contrariwise towards the east.[a] This is made visible to sense-perception by the phenomena and needs no very lengthy explanations to be understood, and these phenomena confirm the cause of the eclipse. Since the sun is eclipsed by being overtaken and the moon by encountering that which produces the eclipse, it is reasonable or rather it is necessary that the sun be caught first from behind and the moon from the front, for the obstruction begins from that point which the intercepting body first assails. The sun is assailed from the west by the moon that is striving after him, and she is assailed from the east ⟨by the earth's shadow⟩ that is sweeping down as it were in the opposite direction. Thirdly, moreover, consider the matter of the duration and the magnitude of lunar eclipses. If the moon is eclipsed when she is high and far from the earth, she is concealed for a little time; but, if this very thing happens to her when she is low and near the earth, she is strongly curbed and is slow to get out of the shadow, although when she is low her exertions of motion are greatest and when she is high they are least. The reason for the difference lies in the shadow, which being broadest at the base, as cones are, and gradually contracting terminates at the vertex in a sharp and fine tip. Consequently the moon, if she has met the shadow when

(p. 210. 6-19 [Ziegler]), 117 (p. 212. 1-12) on the lunar eclipse; ii. 5. 113-114 (p. 204. 27 ff.) on the solar eclipse; Geminus, xii. 5-13 (pp. 138-140 [Manitius]) on the eastward motion of sun and moon.

(933) λαμβάνεται κύκλοις ὑπ' αὐτῆς καὶ διαπερᾷ τὸ
C βύθιον καὶ σκοτωδέστατον ἄνω δ' οἷον ἐν τενάγει διὰ λεπτότητα τοῦ σκιεροῦ χρανθεῖσα ταχέως ἀπαλλάττεται. παρίημι δ' ὅσα χωρὶς ἰδίᾳ πρὸς τὰς φάσεις[1] καὶ διαφορήσεις ἐλέχθη (καὶ γὰρ ἐκεῖναι μέχρι γε τοῦ ἐνδεχομένου προσίενται τὴν αἰτίαν), ἀλλ' ἐπανάγω πρὸς τὸν ὑποκείμενον λόγον ἀρχὴν ἔχοντα τὴν αἴσθησιν. ὁρῶμεν γὰρ ὅτι πῦρ ἐκ τόπου σκιεροῦ διαφαίνεται καὶ διαλάμπει μᾶλλον εἴτε[2] παχύτητι[3] τοῦ σκοτώδους ἀέρος, οὐ δεχομένου τὰς ἀπορρεύσεις[4] καὶ διαχύσεις ἀλλὰ συνέχοντος ἐν ταὐτῷ τὴν οὐσίαν καὶ σφίγγοντος, εἴτε τῆς αἰσθήσεως τοῦτο πάθος ἐστίν, ὡς τὰ θερμὰ παρὰ τὰ

[1] W. L. Bevan ; βάσεις -E, B.
[2] Leonicus ; ἐπὶ -E, B.
[3] Basiliensis ; ταχύτητι -E ; ταχυτῆτι -B.
[4] E : ἀπορεύσεις -B.

[a] *Cf. De Communibus Notitiis*, 1080 B : αὐταὶ γὰρ δήπουθεν αἱ τῶν κωνικῶν τμημάτων ἐπιφάνειαι κύκλοι εἰσίν.

[b] *Cf.* Cleomedes, ii. 6. 119 (pp. 214. 13–216. 8 [Ziegler]) ; for the observation that the planets appear to move most swiftly when they are nearest to the earth and most slowly when they are farthest away *cf.* Cleomedes, ii. 5. 112-114 (pp. 202. 26–206. 27), and Theon of Smyrna, p. 135. 6-11 and p. 157. 2-12 (Hiller). Plutarch's language, however, implies that the moon makes a conscious exertion to accelerate her motion when she is near the earth, and in the myth at 944 A *infra* it is stated that she increases her speed in order to escape the shadow of the earth. Kepler in note 51 to his translation declares that, contrary to what Lucius here says, perigee eclipses even when central are briefer than apogee eclipses ; and Prickard (*Plutarch on the Face of the Moon* [1911], p. 11) says that " *ceteris paribus* an eclipse of a distant moon should be longer by about one fifteenth." Prof. Neugebauer informs me that, using the Ptolemaic figures for the apparent diameter of the moon and of the earth's shadow

she is low, is involved by it in its largest circles [a] and traverses its deep and darkest part ; but above as it were in shallow water by reason of the fineness of the shadow she is just grazed and quickly gets clean away.[b] I pass over all that was said besides with particular reference to the phases and variations,[c] for these too, in so far as is possible,[d] admit the cause alleged ; and instead I revert to the argument before us [e] which has its basis in the evidence of the senses. We see that from a shadowy place fire glows and shines forth more intensely,[f] whether because the dark air being dense does not admit its effluences and diffusions but confines and concentrates the substance in a single place or because this is an affection of our senses that as hot things appear to be hotter in com-

and the classical figures given by Geminus for the velocity, the maximum totality in apogee should be 4 ; 3, 23^{hr} and in perigee 3 ; 20, 0^{hr}.

[c] Probably a reference to such matters as are discussed by Geminus, ix (pp. 124-130 [Manitius]). With τὰς φάσεις καὶ διαφορήσεις *cf.* "species diversitatesque Lunae," Martianus Capella, viii. 871 (p. 459. 15-16 [Dick]).

[d] It is impossible to give an exhaustive and accurately scientific explanation of physical phenomena, for they are involved in the indeterminateness of matter. *Cf.* Aristotle, *Anal. Post.* 87 a 31-37 and *Metaphysics*, 995 a 14-17, 1078 a 9-13 (*cf.* Zeller, *Die Philosophie der Griechen*, ii. 2, p. 166, n. 3) ; and for Plato's more extreme attitude *cf.* especially *Timaeus*, 29 B-C, *Philebus*, 56 and 59. Plutarch appears to have *Philebus*, 56 C in mind at *Quaest. Conviv.* 744 E-F, where he makes astronomy " attendant upon " geometry, as he has *Philebus*, 66 A-B in mind at 720 C (*cf.* R. M. Jones, *Class. Phil.* vii [1912], pp. 76 f.). For the notion of the necessary lack of accuracy of the " physical sciences " *cf.* further *Plat. Quaest.* 1001 E ff. and *Quaest. Conviv.* 699 B.

[e] *Cf.* note *a* on 932 D *supra*.

[f] *Cf.* Cleomedes, ii. 3. 99 (p. 180. 11-13 [Ziegler]) and ii. 6. 120-121 (p. 218. 2-3).

(933) ψυχρὰ θερμότερα καὶ τὰς ἡδονὰς παρὰ τοὺς πόνους σφοδροτέρας οὕτω τὰ λαμπρὰ φαίνεσθαι παρὰ τὰ σκοτεινὰ φανερά, τοῖς διαφόροις πάθεσιν ἀντεπι-
D τείνοντα τὴν φαντασίαν. ἔοικε δὲ πιθανώτερον εἶναι τὸ πρότερον. ἐν γὰρ ἡλίῳ πᾶσα πυρὸς φύσις οὐ μόνον τὸ λαμπρὸν ἀπόλλυσιν ἀλλὰ τῷ εἴκειν γίγνεται δύσεργος καὶ ἀμβλυτέρα· σκίδνησι γὰρ ἡ θερμότης καὶ διαχεῖ[1] τὴν δύναμιν. εἴπερ οὖν ἡ σελήνη πυρὸς εἴληχε βληχροῦ καὶ ἀδρανοῦς ἄστρον οὖσα θολερώτερον, ὥσπερ αὐτοὶ λέγουσιν, οὐδὲν ὧν πάσχουσα φαίνεται νῦν ἀλλὰ τἀναντία πάντα πάσχειν αὐτὴν προσῆκόν ἐστι, φαίνεσθαι μὲν ὅτε κρύ-
E πτεται κρύπτεσθαι δ' ὁπηνίκα φαίνεται, τουτέστι κρύπτεσθαι μὲν τὸν ἄλλον χρόνον ὑπὸ τοῦ περιέχοντος αἰθέρος ἀμαυρουμένην ἐκλάμπειν δὲ καὶ γίγνεσθαι καταφανῆ δι' ἓξ μηνῶν καὶ πάλιν διὰ πέντε τῇ σκιᾷ τῆς γῆς ὑποδυομένην. αἱ γὰρ πέντε καὶ ἑξήκοντα καὶ τετρακόσιαι περίοδοι τῶν ἐκλειπτικῶν πανσελήνων τὰς τέσσαρας καὶ τετρακοσίας ἑξαμήνους ἔχουσι τὰς δ' ἄλλας πενταμήνους. ἔδει τοίνυν διὰ τοσούτων χρόνων φαίνεσθαι τὴν σελήνην ἐν τῇ σκιᾷ λαμπρυνομένην, ἡ δ' ἐν ⟨τῇ σκιᾷ⟩[2] μὲν ἐκλείπει καὶ ἀπόλλυσι τὸ φῶς ἀναλαμ-

[1] Bernardakis (*cf.* 939 c 2 *infra*) ; διαχέει -E, B.
[2] Wyttenbach after Turnebus and Vulcobius ; vac. 5-E, 4-B ; ⟨αὐτῇ⟩ (?)-H. C.

[a] *Cf. Quomodo Adul. ab Amico Internosc.* 57 c, *De Herodoti Malignitate*, 863 E.

parison with cold and pleasures more intense in comparison with pains so bright things appear conspicuous when compared with dark, their appearance being intensified by contrast to the different impressions.[a] The former explanation seems to be the more plausible, for in sunlight fire of every kind not only loses its brilliance but by giving way becomes ineffective and less keen, the reason being that the heat of the sun disperses and dissipates its potency.[b] If, then, as the Stoics themselves assert,[c] the moon, being a rather turbid star, has a faint and feeble fire of her own, she ought to have none of the things happen to her that now obviously do but the very opposite; she ought to be revealed when she is hidden and hidden whenever she is now revealed, that is hidden all the rest of the time when she is bedimmed by the circumambient ether [d] but shining forth and becoming brilliantly clear at intervals of six months or again at intervals of five when she sinks under the shadow of the earth, since of 465 ecliptic full moons 404 occur in cycles of six months and the rest in cycles of five months.[e] It ought to have been at such intervals of time then that the moon is revealed resplendent in the shadow, whereas in ⟨the shadow⟩ she is eclipsed and loses her light but regains

[b] *Cf.* Aristotle, *De Caelo*, 305 a 9-13; [Alexander], *De Anima Libri Mantissa*, p. 128. 2-7 (Bruns), and the explanation of the moon's phases ascribed to Antiphon in *De Placitis*, 891 D = Aëtius, ii. 28. 4 (*Dox. Graeci*, p. 358).

[c] See 928 D *supra* with note *d* there and 935 B *infra*. Reference to the present passage is omitted in *S.V.F.*

[d] αἰθήρ is here used in the Stoic sense as in 922 B and 928 C-D *supra*.

[e] For this period of 465 ecliptic full moons *cf. Class. Phil.* xlvi (1951), p. 145.

(933) βάνει δ' αὖθις ὅταν ἐκφύγῃ τὴν σκιὰν καὶ φαίνεταί γε πολλάκις ἡμέρας ὡς πάντα μᾶλλον ἢ πύρινον οὖσα σῶμα καὶ ἀστεροειδές."

F 21. Εἰπόντος δὲ τοῦτο τοῦ Λευκίου, συνεξέδραμον ἅμα πως τῷ ⟨λέγειν⟩[1] ὅ τε Φαρνάκης καὶ ὁ Ἀπολλωνίδης. εἶτα τοῦ Ἀπολλωνίδου παρέντος[2] ὁ Φαρνάκης εἶπεν ὅτι τοῦτο καὶ μάλιστα τὴν σελήνην δείκνυσιν ἄστρον ἢ πῦρ οὖσαν· οὐ γάρ ἐστι παντελῶς ἄδηλος ἐν ταῖς ἐκλείψεσιν ἀλλὰ διαφαίνει τινὰ χρόαν ἀνθρακώδη καὶ βλοσυρὰν ἥτις ἴδιός ἐστιν αὐτῆς. ὁ δ' Ἀπολλωνίδης ἐνέστη περὶ τῆς σκιᾶς· ἀεὶ γὰρ οὕτως ὀνομάζειν τοὺς[3] μαθηματικοὺς τὸν ἀλαμπῆ τόπον σκιάν[4] τε μὴ δέχεσθαι τὸν οὐρανόν.
934 ἐγὼ δὲ "τοῦτο μὲν" ἔφην "πρὸς τοὔνομα μᾶλλον ἐριστικῶς ἢ πρὸς τὸ πρᾶγμα φυσικῶς καὶ μαθηματικῶς ἐνισταμένου[5]· τὸν γὰρ ἀντιφραττόμενον ὑπὸ τῆς γῆς τόπον εἰ μὴ σκιάν τις ἐθέλοι καλεῖν ἀλλ' ἀφεγγὲς χωρίον, ὅμως ἀναγκαῖον ἐν αὐτῷ τὴν σελήνην γενομένην ⟨ἐπισκοτεῖσθαι τοῦ ἡλιακοῦ φωτὸς στερομένην.⟩[6] καὶ ὅλως" ἔφην "εὐηθές ἐστιν ἐκεῖ μὴ φάναι τῆς γῆς ἐξικνεῖσθαι τὴν σκιὰν

[1] H. C.; vac. 6-E, 5-B.
[2] Wyttenbach after Xylander's version; *παρόντος* -E, B.
[3] *οὕτως* vac. 2 *ὀναμάζειν τοὺς* -E; *οὕτως ὀνομάζειν* vac. 5 *τοὺς* -B; lacuna suppressed by Kepler and Wyttenbach.
[4] Aldine, Basiliensis; *τόπον* vac. 4-E, 6-B *σκιάν* (the lacuna in E is immediately under that after *οὕτως* in the line above).
[5] Wyttenbach after Xylander's version; *ἐνισταμένους* -E, B.
[6] H. C. (*cf.* Cleomedes, p. 192. 21-22 [Ziegler]); vac. 38-E, 39-B.

[a] For this argument *cf.* Cleomedes, ii. 4. 103 (p. 182. 10-16 [Ziegler]).
[b] = *S.V.F.* ii, frag. 672. *Cf.* Pliny, *Nat. Hist.* ii. 9. 42

it again as soon as she escapes the shadow [a] and is revealed often even by day, which implies that she is anything but a fiery and star-like body."

21. When Lucius said this, almost while ⟨he was speaking⟩ Pharnaces and Apollonides sprang forth together. Then, Apollonides having yielded, Pharnaces said that this very point above all proves the moon to be a star or fire, since she is not entirely invisible in her eclipses but displays a colour smouldering and grim which is peculiar to her.[b] Apollonides raised an objection concerning the "shadow" on the ground that scientists always give this name to the region that is without light and the heaven does not admit shadow.[c] "This," I said, "is the objection of one who speaks captiously to the name rather than like a natural scientist and mathematician to the fact. If one refuses to call the region screened by the earth 'shadow' and insists upon calling it 'lightless space,' nevertheless when the moon gets into it she must ⟨be obscured since she is deprived of the solar light⟩. Speaking generally too, it is silly," I said, "to deny that the shadow of the earth reaches

("deficiens et in defectu tamen conspicua"); Olympiodorus, *In Meteor.* p. 67. 36-37; Philoponus, *In Meteor.* pp. 30. 37–31. 1 and p. 106. 9-13. The moon is seldom invisible to the naked eye even in total eclipses (cf. Dyson and Woolley, *Eclipses of the Sun and Moon*, p. 30: C. A. Young, *Manual of Astronomy* [1902], § 287; Boll, *s.v.* "Finsternisse," *R.E.* vi. 2344); and the apparent colour of the moon in total eclipse was as late as the 16th century adduced as evidence that the moon had light of its own, a notion entertained as possible even by W. Herschel (*cf.* Pixis, *Kepler als Geograph*, pp. 132-133).

[c] For a Stoic this follows from the definition of οὐρανός as ἔσχατον αἰθέρος and πύρινον (*cf.* *S.V.F.* i, p. 33, frags. 115 and 116; *S.V.F.* ii, frag. 580 [p. 180. 10-12]).

(934) ⟨ὁπόθεν καὶ⟩[1] ἡ σκιὰ τῆς σελήνης ἐπιπίπτουσα τῇ ὄψει καὶ ⟨διήκουσα⟩[2] πρὸς τὴν γῆν ἔκλειψιν ἡλίου B ποιεῖ.[3] πρὸς σὲ δέ, ὦ Φαρνάκη, τρέψομαι. τὸ γὰρ ἀνθρακῶδες ἐκεῖνο καὶ διακαὲς χρῶμα τῆς σελήνης ὃ φῂς ἴδιον αὐτῆς εἶναι σώματός ἐστι πυκνότητα καὶ βάθος ἔχοντος· οὐδὲν γὰρ ἐθέλει τοῖς ἀραιοῖς[4] ὑπόλειμμα φλογὸς οὐδ' ἴχνος ἐμμένειν οὐδ' ἔστιν ἀνθρακογένεσις οὗ μὴ[5] στερέμνιον σῶμα δεξάμενον διὰ βάθους τὴν πύρωσιν καὶ σῷζον,[6] ὥς που καὶ Ὅμηρος εἴρηκεν

αὐτὰρ ἐπεὶ πυρὸς ἄνθος ἀπέπτατο παύσατο δὲ φλὸξ
ἀνθρακιὴν στορέσας. . . .[7]

ὁ γὰρ ἄνθραξ ἔοικεν οὐ πῦρ ἀλλὰ σῶμα πεπυρωμένον εἶναι καὶ πεπονθὸς ὑπὸ πυρός, στερεῷ καὶ ῥίζαν ἔχοντι προσμένοντος ὄγκῳ καὶ προσδιατρίβοντος, C αἱ δὲ φλόγες ἀραιᾶς εἰσιν ἔξαψις καὶ ῥεύματα τροφῆς καὶ ὕλης, ταχὺ δι' ἀσθένειαν ἀναλυομένης, ὥστ' οὐδὲν ἂν ὑπῆρχε τοῦ[8] γεώδη καὶ πυκνὴν εἶναι τὴν σελήνην ἕτερον οὕτως ἐναργὲς τεκμήριον εἴπερ

[1] Purser (implied by Amyot's version); vac. 10-E, 9-B.
[2] Turnebus; vac. 6-E, 9-B.
[3] -Anon., Aldine, R.J. 94; ποιεῖν -E, B.
[4] Xylander; ἀρχαίοις -E, B.
[5] Wyttenbach; οὐ μὴν -E, B (for the same scribal error *cf.* Aristotle, *Politics*, 1301 b 27).
[6] Xylander; σόλων -E, B.
[7] E; στορέσασα -B.
[8] E; omitted by B.

[a] *Cf.* 922 A-B *supra*. With ἀνθρακογένεσις, "incandescence," Raingeard compares ἀνθρακοποιΐα in Gregory of Nyssa, iii. 937 A.

that point ⟨from which on its part⟩ the shadow of the moon by impinging upon the sight and ⟨extending⟩ to the earth produces an eclipse of the sun. Now I shall turn to you, Pharnaces. That smouldering and glowing colour of the moon which you say is peculiar to her is characteristic of a body that is compact and a solid, for no remnant or trace of flame will remain in tenuous things nor is incandescence possible unless there is a hard body that has been ignited through and through and sustains the ignition.[a] So Homer too has somewhere said :

> But when fire's bloom had flown and flame had ceased
> He smoothed the embers. . . .[b]

The reason probably is that what is igneous [c] is not fire but body that has been ignited and subjected to the action of fire, which adheres to a solid and stable mass and continues to occupy itself with it, whereas flames are the kindling and flux of tenuous nourishment or matter which because of its feebleness is swiftly dissolved. Consequently there would be no other proof of the moon's earthy and compact nature so manifest as the smouldering colour, if it

[b] *Iliad*, ix. 212-213 in our texts read :

> αὐτὰρ ἐπεὶ κατὰ πῦρ ἐκάη καὶ φλὸξ ἐμαράνθη,
> ἀνθρακιὴν στορέσας ὀβελοὺς ἐφύπερθε τάνυσσε,

but the first line as Plutarch gives it was known to Aristarchus, who rejected it (*cf.* Ludwich, *Aristarchs Homerische Textkritik*, i, p. 302 ; Eustathius, *Ad Iliadem*, 748. 41 ; *Scholia Graeca in Homeri Iliadem*, ed. Dindorf, i, p. 312).

[c] Purser has pointed out (*Hermathena*, xvi [1911], p. 316) that ἄνθραξ may mean all degrees of burning coal from complete incandescence to ashes and that fire's need of solid matter to work upon was often used as an argument against the Stoic conflagration of the world : *cf.* Philo, *De Aeternitate Mundi*, §§ 86-88 (vi, pp. 99. 14–100. 10 [Cohn-Reiter]).

(934) αὐτῆς ἴδιον ἦν ὡς χρῶμα τὸ ἀνθρακῶδες. ἀλλ' οὐκ ἔστιν, ὦ φίλε Φαρνάκη· πολλὰς γάρ[1] ἐκλείπουσα[2] χρόας ἀμείβει[3] καὶ διαιροῦσιν αὐτὰς οὕτως οἱ μαθηματικοὶ κατὰ χρόνον καὶ ὥραν ἀφορίζοντες. ἂν ἀφ' ἑσπέρας ἐκλείπῃ φαίνεται μέλαινα δεινῶς ἄχρι τρίτης ὥρας καὶ ἡμισείας· ἂν δὲ μέσῃ, τοῦτο δὴ τὸ ἐπιφοινίσσον ἵησι [καὶ πῦρ][4] καὶ πυρωπόν· ἀπὸ δ' ἑβδόμης ὥρας καὶ ἡμισείας ἀνίσταται τὸ
D ἐρύθημα· καὶ τέλος ἤδη[5] πρὸς ἕω λαμβάνει[6] χρόαν κυανοειδῆ καὶ χαροπὴν ἀφ' ἧς δὴ καὶ μάλιστα 'γλαυκῶπιν' αὐτὴν οἱ ποιηταὶ καὶ Ἐμπεδοκλῆς ἀνακαλοῦνται. τοσαύτας οὖν χρόας ἐν τῇ σκιᾷ τὴν σελήνην λαμβάνουσαν ὁρῶντες οὐκ ὀρθῶς ἐπὶ μόνον καταφέρονται τὸ ἀνθρακῶδες ὃ μάλιστα φήσαι τις ἂν ἀλλότριον αὐτῆς εἶναι καὶ μᾶλλον ὑπόμιγμα καὶ λεῖμμα τοῦ φωτὸς διὰ τῆς σκιᾶς

[1] Turnebus: τὰς -E, B.
[2] Dübner (implied by Xylander's and Amyot's versions): ἐκλειπούσας -E, B.
[3] Wyttenbach (implied by Amyot's version); ἀμείβειν -E, B.
[4] Excised by Emperius.
[5] B; ἤδῃ -E.
[6] Stephanus (1624); λαμβάνειν -E, B.

[a] *Cf. Aemilius Paulus*, 17 (264 B), *Nicias*, 23 (538 E) and for a description and explanation of the phenomenon *cf.* Sir John Herschel, *Outlines of Astronomy*, §§ 421-424, and J. F. J. Schmidt, *Der Mond* (Leipzig, 1836), p. 35. Astrology assigned special significance to the various colours of the moon in total eclipse: *cf. Catalogus Codicum Astrologorum Graecorum*, vii (Brussels, 1908), p. 131. 6 ff.; Ptolemy, *Apotelesmatica*, ii. 14. 4-5 (pp. 101-102 [Boll-Boer]) and ii. 10. 1-2 (pp. 91-92); and Boll in *R.E.* vi. 2350 assumes that by μαθηματικοί in the present passage Plutarch means "astrologers" (but see 937 F *infra*). Neither there nor in his article, "Antike Beobachtungen farbiger Sterne," does Boll mention

really were her own. But it is not so, my dear Pharnaces, for as she is eclipsed she exhibits many changes of colour which scientists have distinguished as follows, delimiting them according to time or hour.[a] If the eclipse occurs between eventide and half after the third hour, she appears terribly black; if at midnight, then she gives off this reddish and fiery colour; from half after the seventh hour a blush arises [b] on her face: and finally, if she is eclipsed when dawn is already near, she takes on a bluish or azure [c] hue, from which especially it is that the poets and Empedocles give her the epithet 'bright-eyed.' [d] Now, when one sees the moon take on so many hues in the shadow, it is a mistake to settle upon the smouldering colour alone, the very one that might especially be called alien to her and rather an admixture or remnant of the light shining round about through the shadow, while the black or earthy

any classification of the colours according to the time of the eclipse, however, nor does Gundel, *s.v.* "Mond" in *R.E.* xvi. 1. 101-102. Geminus's calendar for the different phases of the moon (ix. 14-15 [pp. 128-130, Manitius]) has no connection with this matter and so is not, as Adler supposes (*Diss. Phil. Vind.* x, p. 157), an indication that Plutarch's source in the present passage was Posidonius.

[b] This, *pace* Prickard, must be the meaning of ἀνίσταται here; *cf.* ἀνιστάμενος in *Pompey*, 34 (637 D) and ἀναστάντος in Appian, *B.C.* i. 56 (ii. p. 61. 7 [Mendelssohn-Viereck]).

[c] In *Marius*, 11 (411 D) χαροπότης is used of the eye-colour of the Teutons and Cimbrians, and in *De Iside*, 352 D the colour of the flax-flower is said to resemble τῇ περιεχούσῃ τὸν κόσμον αἰθερίῳ χαροπότητι.

[d] See 929 D *supra* and note *b* there; but Diels (*Hermes*, xv [1880], p. 176) because of ἀνακαλοῦνται thought that Plutarch must here have had in mind a verse of Empedocles that ended with the invocation, γλαυκῶπι Σελήνη. *Cf.* also Euripides, frag. 1009 (Nauck²).

(934) περιλάμποντος ἴδιον δὲ τὸ μέλαν καὶ γεῶδες. ὅπου δὲ πορφυρίσιν ἐνταῦθα καὶ φοινικίσι λίμναις τε καὶ ποταμοῖς δεχομένοις ἥλιον ἐπίσκια χωρία γειτνιῶντα συγχρώζεται καὶ περιλάμπεται διὰ τὰς ἀνακλάσεις ἀποδιδόντα πολλοὺς καὶ διαφόρους
E ἀπαυγασμούς, τί θαυμαστὸν εἰ ῥεῦμα πολὺ σκιᾶς ἐμβάλλον ὥσπερ εἰς πέλαγος οὐράνιον οὐ σταθεροῦ φωτὸς οὐδ' ἠρεμοῦντος ἀλλὰ μυρίοις ἄστροις περιελαυνομένου[1] μίξεις τε παντοδαπὰς καὶ μεταβολὰς λαμβάνοντος ἄλλην ἄλλοτε χρόαν ἐκματτόμενον ἀπὸ τῆς σελήνης ἐνταῦθ' ἀποδίδωσιν; ἄστρον μὲν γὰρ ἢ πῦρ οὐκ ἂν ἐν σκιᾷ διαφανείη μέλαν ἢ γλαυκὸν ἢ κυανοειδές, ὄρεσι δὲ καὶ πεδίοις καὶ θαλάσσαις
F πολλαὶ μὲν ἀφ' ἡλίου μορφαὶ χρωμάτων ἐπιτρέχουσι, καὶ σκιαῖς καὶ ὁμίχλαις οἵας φαρμάκοις γραφικοῖς μιγνύμενον ἐπάγει βαφὰς τὸ λαμπρόν. ὧν τὰ μὲν τῆς θαλάττης ἐπικεχείρηκεν ἁμωσγέπως ἐξονομάζειν Ὅμηρος 'ἰοειδέα' καλῶν καὶ 'οἴνοπα πόντον' αὖθις δὲ 'πορφύρεον κῦμα' 'γλαυκήν' τ' ἄλλως 'θάλασσαν' καὶ 'λευκὴν γαλήνην' τὰς δὲ περὶ τὴν γῆν διαφορὰς τῶν ἄλλοτ' ἄλλως ἐπιφαινομένων χρωμάτων παρῆκεν ὡς ἀπείρους τὸ πλῆθος οὔσας. τὴν δὲ σελήνην οὐκ εἰκὸς ὥσπερ[2] τὴν θάλασσαν μίαν ἔχειν ἐπιφάνειαν ἀλλ' ἐοικέναι μάλιστα τῇ γῇ τὴν φύσιν ἣν ἐμυθολόγει Σωκράτης

[1] E ; ἐλαυνομένου -B.
[2] E ; omitted in B.

[a] Kepler remarks on this sentence (note 56): "Ecce Plutarchum meae sententiae proxime accedentem, nisi quod non dicit, a quo lucente sit illud lumen, num ab aethere, an a Sole ipso, per refractionem ejus radiorum."

[b] *Cf.* the similar but more elaborate description in *De*

colour should be called her own.[a] Since here on earth places near lakes and rivers open to the sun take on the colour and brilliance of the purple and red awnings that shade them, by reason of the reflections giving off many various effulgences, what wonder if a great flood of shade debouching as it were into a heavenly sea of light, not calm or at rest but undergoing all sorts of combinations and alterations as it is churned about by countless stars, takes from the moon at different times the stain of different hues and presents them to our sight? [b] A star or fire could not in shadow shine out black or glaucous or bluish; but over mountains, plains, and sea flit many kinds of colours from the sun, and blended with the shadows and mists his brilliance [c] induces such tints as brilliance does when blended with a painter's pigments. Those of the sea Homer has endeavoured somehow or other to designate, using the terms 'violet' [d] and 'wine-dark deep' [e] and again 'purple swell' [f] and elsewhere 'glaucous sea' [g] and 'white calm' [h]; but he passed over as being an endless multitude the variations of the colours that appear differently at different times about the land. It is likely, however, that the moon has not a single plane surface like the sea but closely resembles in constitution the earth that the ancient Socrates made the subject of a myth,[i]

Genio Socratis, 590 c ff., where the stars are islands moving in a celestial sea, and also *De Sera Numinis Vindicta*, 563 E-F.

[c] For λαμπρόν, "brilliance," as a colour *cf.* Plato, *Timaeus*, 68 A; Theophrastus calls it τὸ πυρῶδες λευκόν (*De Sensibus*, § 86 [*Dox. Graeci*, p. 525. 23]).

[d] *e.g. Iliad*, xi. 298.

[e] *e.g. Iliad*, i. 350.

[f] *e.g. Iliad*, i. 481-482.

[g] Only in *Iliad*, xvi. 34 (*cf. Scholia Graeca in Homeri Iliadem*, ed. Dindorf, ii, p. 92).

[h] *Odyssey*, x. 94.

[i] Plato, *Phaedo*, 110 B ff.

935 ὁ παλαιὸς εἴτε δὴ ταύτην αἰνιττόμενος εἴτε δὴ ἄλλην τινὰ διηγούμενος· οὐ γὰρ ἄπιστον οὐδὲ θαυμαστὸν εἰ μηδὲν ἔχουσα διεφθορὸς ⟨ἐν⟩[1] ἑαυτῇ μηδ' ἰλυῶδες ἀλλὰ φῶς τε καρπουμένη καθαρὸν ἐξ οὐρανοῦ καὶ θερμότητος οὐ διακαοῦς οὐδὲ μανικοῦ πυρὸς ἀλλὰ νοτεροῦ[2] καὶ ἀβλαβοῦς καὶ κατὰ φύσιν ἔχοντος οὖσα πλήρης κάλλη τε θαυμαστὰ κέκτηται τόπων ὄρη τε φλογοειδῆ καὶ ζώνας ἁλουργοὺς[3] ἔχει, χρυσόν τε καὶ ἄργυρον οὐκ ἐν βάθει διεσπαρμένον ἀλλὰ πρὸς τοῖς πεδίοις ἐξανθοῦντα πολὺν ἢ πρὸς ὕψεσι λείοις περιφαινόμενον.[4] εἰ δὲ τούτων
B ὄψις ἀφικνεῖται διὰ τῆς σκιᾶς ἄλλοτ' ἄλλη πρὸς ἡμᾶς ἐξαλλαγῇ καὶ διαφορᾷ τινι τοῦ περιέχοντος, τό γε μὴν τίμιον οὐκ ἀπόλλυσι τῆς δόξης οὐδὲ τὸ θεῖον ἡ σελήνη, ⟨γ⟩ῆ τις[5] ⟨ὀλυμπία καὶ⟩[6] ἱερὰ πρὸς ἀνθρώπων νομιζομένη μᾶλλον ἢ[7] πῦρ θολερὸν ὥσπερ οἱ Στωικοὶ λέγουσι καὶ τρυγῶδες. πῦρ μέν γε παρὰ Μήδοις καὶ Ἀσσυρίοις βαρβαρικὰς ἔχει τιμάς, οἳ φόβῳ τὰ βλάπτοντα θεραπεύουσι πρὸ τῶν σεμνῶν ἀφοσιούμενοι, τὸ δὲ γῆς ὄνομα παντί που φίλον Ἕλληνι καὶ τίμιον καὶ πατρῷον ἡμῖν ὥσπερ
C ἄλλον τινὰ θεὸν[8] σέβεσθαι. πολλοῦ δὲ δέομεν[9]

[1] Emperius; omitted without lacuna -E, B.
[2] νοεροῦ? -H. C. [3] E: ἁλουργὰς -B.
[4] Bernardakis (*cf. Brutus*, 42 [1004 A]; *Pompey*, 19 [628 D]; *Fabius Max.* 5 [176 E]); περιφερόμενον -E, B.
[5] Emperius; ἥτις -E, B.
[6] Bernardakis (*cf.* 935 C *infra* and *De Defectu Oraculorum*, 416 E); vac. 9-E, 13-B. [7] Turnebus; ἢ μᾶλλον -E, B.
[8] B: θεῶν -E. [9] Basiliensis; δεῖ οἵ μὲν -E; δεῖ οἱ μὲν -B.

[a] "This one," ταύτην, means the earth, not the moon, as most translators since Wyttenbach have thought; "some other," ἄλλην τινά, means "some other earth," which is exactly what Lamprias believes the moon to be. So Lamprias

whether he really was speaking in riddles about this earth or was giving a description of some other.[a] It is in fact not incredible or wonderful that the moon, if she has nothing corrupted or slimy ⟨in⟩ her but garners pure light from heaven and is filled with warmth, which is fire not glowing or raging but moist [b] and harmless and in its natural state, has got open regions of marvellous beauty and mountains flaming bright and has zones of royal purple with gold and silver not scattered in her depths but bursting forth in abundance on the plains or openly visible on the smooth heights.[c] If through the shadow there comes to us a glimpse of these, different at different times because of some variation and difference of the atmosphere, the honourable repute of the moon is surely not impaired nor is her divinity because she is held by men to be a ⟨celestial and⟩ holy earth rather than, as the Stoics say, a fire turbid and dreggish.[d] Fire, to be sure, is given barbaric honours among the Medes and Assyrians, who from fear by way of propitiation worship the maleficent forces rather than the reverend ; but to every Greek, of course, the name of earth is dear and honourable, and it is our ancestral tradition to revere her like any other god. As men we are far from thinking that the

means that what Socrates said must be considered as a riddle if he was really talking about our earth but can be taken as straightforward description if he was referring to " some other earth," *i.e.* the moon.

[b] Or, if νοτεροῦ is a scribal error for νοεροῦ, " intellectual " ; *cf. Class. Phil.* xlvi (1951), p. 145.

[c] The details of this description were suggested by *Phaedo*, 110 C—111 C, to which Plutarch has referred above.

[d] See 928 D and 933 D *supra*. The present passage is not listed in *S.V.F.*

(935) ἄνθρωποι τὴν σελήνην, γῆν οὖσαν ὀλυμπίαν, ἄψυχον ἡγεῖσθαι σῶμα καὶ ἄνουν καὶ ἄμοιρον ὧν θεοῖς ἀπάρχεσθαι προσήκει νόμῳ τε τῶν ἀγαθῶν ἀμοιβὰς τίνοντας καὶ κατὰ φύσιν σεβομένους τὸ κρεῖττον ἀρετῇ καὶ δυνάμει καὶ τιμιώτερον. ὥστε μηδὲν οἰώμεθα πλημμελεῖν γῆν[1] αὐτὴν θέμενοι τὸ δὲ φαινόμενον τουτὶ πρόσωπον αὐτῆς, ὥσπερ ἡ παρ' ἡμῖν ἔχει γῆ κόλπους τινὰς μεγάλους, οὕτως ἐκείνην ἀνεπτύχθαι βάθεσι μεγάλοις καὶ ῥήξεσιν ὕδωρ ἢ ζοφερὸν ἀέρα περιέχουσιν ὧν ἐντὸς οὐ καθίησιν οὐδ' ἐπιψαύει τὸ τοῦ ἡλίου φῶς ἀλλ' ἐκλείπει καὶ διεσπασμένην ἐνταῦθα τὴν ἀνάκλασιν ἀποδίδωσιν."

D 22. Ὑπολαβὼν δ' ὁ Ἀπολλωνίδης "εἶτ', ὦ πρὸς αὐτῆς" ἔφη "τῆς σελήνης, δυνατὸν εἶναι δοκεῖ ὑμῖν ῥηγμάτων τινῶν ἢ φαράγγων εἶναι σκιὰς κἀκεῖθεν ἀφικνεῖσθαι δεῦρο πρὸς τὴν ὄψιν, ἢ τὸ συμβαῖνον οὐ λογίζεσθε κἀγὼ τουτὶ εἴπω; ἀκούοιτε δὴ[2] καίπερ οὐκ ἀγνοοῦντες. ἡ μὲν διάμετρος τῆς σελήνης δυοκαίδεκα δακτύλους ἔχει τὸ φαινόμενον ἐν τοῖς μέσοις ἀποστήμασι μέγεθος. τῶν δὲ μελάνων καὶ σκιερῶν ἕκαστον ἡμιδακτυλίου φαίνεται μεῖζον ὥστε τῆς διαμέτρου μεῖζον ἢ
E εἰκοστοτέταρτον εἶναι. καὶ μήν, εἰ μόνων ὑποθοίμεθα τὴν περίμετρον τῆς σελήνης τρισμυρίων σταδίων μυρίων δὲ τὴν διάμετρον, κατὰ τὸ ὑποκείμενον οὐκ ἔλαττον ἂν εἴη[3] πεντακοσίων σταδίων

[1] Basiliensis ; τὴν -E, B.
[2] Turnebus ; ἀκούοιτε δὲ -E, B (but B has this phrase *after* καίπερ οὐκ ἀγνοοῦντες).
[3] Turnebus ; εἶναι -E, B.

moon, because she is a celestial [a] earth, is a body without soul and mind and without share in the first-fruits that it beseems us to offer to the gods, according to custom requiting them for the goods we have received and naturally revering what is better and more honourable in virtue and power. Consequently let us not think it an offence to suppose that she is earth and that for this which appears to be her face, just as our earth has certain great gulfs, so that earth yawns with great depths and clefts which contain water or murky air ; the interior of these the light of the sun does not plumb or even touch, but it fails and the reflection which it sends back here is discontinuous." [b]

22. Here Apollonides broke in. "Then by the moon herself," he said, "do you people think it possible that any clefts and chasms cast shadows which from the moon reach our sight here ; or do you not reckon the consequence, and shall I tell you what it is ? Please listen then, though it is not anything unknown to you. The diameter of the moon measures twelve digits in apparent size at her mean distance [c] ; and each of the black and shadowy spots appears greater than half a digit and consequently would be greater than one twenty-fourth of her diameter. Well then, if we should suppose that the circumference of the moon is only thirty thousand stades and her diameter ten thousand, each of the shadowy spots on her would in accordance with the

[a] See note *c* on 929 A *supra*.

[b] For this "discontinuousness" of the reflection *cf.* 921 C *supra* and especially *Quaest. Conviv.* 696 A-C.

[c] *Cf.* Cleomedes, ii. 3. 95 (p. 172. 25-27 [Ziegler]) ; on this measurement of 12 digits *cf.* Heath, *Aristarchus of Samos*, p. 23, n. 1.

(935) ἐν αὐτῇ τῶν σκιερῶν ἕκαστον. ὅρα δὴ πρῶτον ἂν ᾖ δυνατὸν τῇ σελήνῃ τηλικαῦτα βάθη καὶ τηλικαύτας εἶναι τραχύτητας ὥστε σκιὰν ποιεῖν τοσαύτην, ἔπειτα πῶς οὖσαι τηλικαῦται τὸ μέγεθος ὑφ' ἡμῶν οὐχ ὁρῶνται." κἀγὼ μειδιάσας πρὸς αὐτὸν "εὖγ'" ἔφην "ὅτι τοιαύτην ἐξεύρηκας ἀπόδειξιν, ὦ Ἀπολλωνίδη, δι' ἧς κἀμὲ καὶ σαυτὸν F ἀποδείξεις τῶν Ἀλωαδῶν[1] ἐκείνων εἶναι μείζονας[2] οὐκ ἐν ἅπαντι μέντοι χρόνῳ τῆς ἡμέρας ἀλλὰ πρωῒ μάλιστα καὶ δείλης, ⟨εἰ⟩[3] οἴει, τὰς σκιὰς ἡμῶν τοῦ ἡλίου ποιοῦντος ἠλιβάτους, τὸν καλὸν τοῦτον αἰσθήσει παρέχειν συλλογισμὸν ὡς, εἰ μέγα τὸ σκιαζόμενον, ὑπερμέγεθες τὸ σκιάζον. ἐν Λήμνῳ μὲν οὐδέτερος ἡμῶν εὖ οἶδ' ὅτι γέγονε, τουτὶ μέντοι τὸ θρυλούμενον[4] ἰαμβεῖον ἀμφότεροι πολλάκις ἀκη-

[1] Dübner ; ἀλλωάδων -E ; ἀλωάδων B.
[2] E ; μείζονας εἶναι -B.
[3] Emperius : δείλης. οἴει -E, B ; δείλης, ⟨ὃς⟩ οἴει -Purser.
[4] H. C. (*cf. Quaest. Conviv.* 641 B, *De Aud. Poetis*, 17 F and 36 B, *De Amic. Multitudine*, 94 A, *De Communibus Notitiis*, 1078 C, *De Stoicorum Repugnantiis*, 1050 B) ; τεθρυλλημένον -E ; θρυλλούμενον -B.

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[a] Apollonides exaggerates for the sake of his point, for 500 stades is $\frac{1}{20}$, not $\frac{1}{24}$ of 10,000 ; but he has guarded himself by saying that each of the spots is *more* than half a digit and so *more* than $\frac{1}{24}$ of the diameter. On the other hand, he intends his estimate of the moon's size to err, if at all, on the side of conservatism : *cf.* "only thirty thousand stades." Such small figures, even as minima, are remarkable, however. Cleomedes (ii. 1. 80-81 [pp. 146. 25–148. 3, Ziegler]) gives

assumption measure not less than five hundred stades.[a] Consider now in the first place whether it is possible for the moon to have depths and corrugations so great as to cast such a large shadow ; in the second place why, if they are of such great magnitude, we do not see them." Then I said to him with a smile : "Congratulations for having discovered such a demonstration, Apollonides. It would enable you to prove that both you and I are taller than the famous sons of Aloeus,[b] not at every time of day to be sure but early in the morning particularly and in late afternoon, ⟨if⟩, when the sun makes our shadows enormous, you intend to supply sensation with this lovely reasoning that, if the shadow cast is large, what casts the shadow is immense. I am well aware that neither of us has been in Lemnos ; we have both, however,

40,000 stades as the lunar diameter, basing this upon the assumption that the earth is twice as large as the moon and has a circumference of 250,000 stades according to the measurement of Eratosthenes and a diameter therefore of "more than 80,000 stades." Plutarch adopted the same figure for the terrestrial diameter (see 925 D *supra*) but supposed this and the terrestrial circumference to be *three* times those of the moon (see 923 B *supra* and note *d* there), figures which should have given him more than 26,000 stades as the lunar diameter. According to Hultsch, however, Posidonius must have calculated the lunar diameter to be 12,000 stades (cf. *Abhand. K. Gesell. Wissensch. zu Göttingen*, Phil.-Hist. Kl., N.F. i, No. 5, p. 38), which by the usual approximation would have given 36,000 stades for the lunar circumference ; and Apollonides' minimal estimate may have been based upon these figures. For the common "rough approximation" 3·1 as the relation of circumference to diameter *cf.* Archimedes, *Arenarius*, ii. 3 (*Opera Omnia*, ii, p. 234. 28-29 [Heiberg]).

[b] Otus and Ephialtes : *cf. De Exilio*, 602 D ; *Iliad*, v. 385-387 ; *Odyssey*, xi. 305-320 ; Apollodorus, *Bibliotheca*, i. 7. 4. 2-4.

(935) κόαμεν

"Αθως καλύψει[1] πλευρὰ[2] Λημνίας βοός·

ἐπιβάλλει γὰρ ἡ σκιὰ τοῦ ὄρους, ὡς ἔοικε, χαλκέῳ
936 τινὶ βοϊδίῳ, μῆκος ἀποτείνουσα διὰ τῆς θαλάττης οὐκ ἔλαττον ἑπτακοσίων σταδίων. ⟨ἀλλ' οὐ χρὴ δήπουθεν ἑπτακοσίων σταδίων⟩[3] τὸ κατασκιάζον ὕψος εἶναι διὰ τὴν αἰτίαν ὅτι πολλαπλασίους αἱ τοῦ φωτὸς ἀποστάσεις τῶν σωμάτων τὰς σκιὰς ποιοῦσι. δεῦρο δὴ θεῶ καὶ τῆς σελήνης ὅτε πάμμηνός ἐστι καὶ μάλιστα τὴν ἰδέαν ἔναρθρον τοῦ προσώπου βαθύτητι τῆς σκιᾶς ἀποδίδωσι τὸ μέγιστον ἀπέχοντα διάστημα τὸν ἥλιον· ἡ γὰρ ἀπόστασις τοῦ φωτὸς αὐτὴ τὴν σκιὰν μεγάλην οὐ τὰ μεγέθη τῶν ὑπὲρ τὴν σελήνην ἀνωμαλιῶν πεποίηκε. καὶ μὴν οὐδὲ τῶν ὀρῶν[4] τὰς ὑπεροχὰς ἐῶσι μεθ' ἡμέραν[5] αἱ
B περιαυγαὶ τοῦ ἡλίου καθορᾶσθαι, τὰ μέντοι βαθέα καὶ κοῖλα φαίνεται καὶ σκιώδη πόρρωθεν. οὐδὲν οὖν ἄτοπον εἰ καὶ τῆς σελήνης τὴν ἀντίλαμψιν[6] καὶ τὸν ἐπιφωτισμὸν οὐκ ἔστι καθορᾶν ἀκριβῶς αἱ δὲ

[1] E, B; καλύπτει -Van Herwerden.
[2] Aldine, Basiliensis; πλευρᾶς -E, B[1]; πλευρὰς -B[2].
[3] H. C. after Purser's ⟨οὐ χρὴ δὲ ἑπτακοσίων σταδίων⟩; no lacuna in E or B; lacuna indicated in Xylander's version; "(At non ideo tantam faciemus illam) altitudinem," etc. -Kepler.
[4] B; ὁρῶν -E.
[5] Stephanus (1624): μεθημέραν -E, B.
[6] Apelt; ἀντίληψιν -E, B.

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[a] The verse, which comes from an unidentified tragedy of Sophocles, is elsewhere quoted with καλύπτει or σκιάζει and with πλευρά or νῶτα (*cf.* Nauck, *Trag. Graec. Frag.*[2], p. 299, frag. 708). For the shadow of Athos cast upon Lemnos *cf.*

often heard this line that is on everyone's lips :

> Athos will veil the Lemnian heifer's flank.[a]

The point of this apparently is that the shadow of the mountain, extending not less than seven hundred stades over the sea,[b] falls upon a little bronze heifer ; ⟨but it is not necessary, I presume,⟩ that what casts the shadow be ⟨seven hundred stades⟩ high, for the reason that shadows are made many times the size of the objects that cast them by the remoteness of the light from the objects.[c] Come then, observe that, when the moon is at the full and because of the shadow's depth exhibits most articulately the appearance of the face, the sun is at his maximum distance from her. The reason is that the remoteness of the light alone and not the magnitude of the irregularities on the surface of the moon has made the shadow large. Besides, even in the case of mountains the dazzling beams of the sun prevent their crags from being discerned in broad daylight, although their depths and hollows and shadowy parts are visible from afar. So it is not at all strange that in the case of the moon too it is not possible to discern accurately the reflection and illumination, whereas the juxta-

Pliny, *Nat. Hist.* iv. 12 (23). 73 ; Apollonius Rhodius, i. 601-604 ; Proclus, *In Timaeum*, 56 B (i, p. 181. 12 ff. [Diehl]).

[b] Proclus (*loc. cit.*) says that this is the distance of Lemnos from Athos, Plutarch rather that it is the length of the shadow cast by the mountain. According to Eustathius (*Ad Iliadem*, 980. 45 ff.), Athos is 300 stades distant from Lemnos, according to Pliny (*loc. cit.*) 87 Roman miles (unless this is a scribal error for XXXXVII). The actual distance is said to be about 50 miles ; and Athos, which is 6350 feet high, could cast a shadow for almost 100 miles over open sea.

[c] In this Plutarch is guilty either of an error or of an intentional sophism ; *cf. Class. Phil.* xlvi (1951), p. 145.

(936) τῶν σκιερῶν παραθέσεις παρὰ τὰ λαμπρὰ τῇ διαφορᾷ τὴν ὄψιν οὐ λανθάνουσιν.

23. 'Ἀλλ' ἐκεῖνο μᾶλλον" ἔφην "ἐλέγχειν δοκεῖ τὴν λεγομένην ἀνάκλασιν ἀπὸ τῆς σελήνης, ὅτι τοὺς ἐν ταῖς ἀνακλωμέναις αὐγαῖς ἑστῶτας οὐ μόνον συμβαίνει τὸ φωτιζόμενον ὁρᾶν ἀλλὰ καὶ τὸ φωτίζον. ὅταν γὰρ αὐγῆς ἀφ' ὕδατος πρὸς τοῖχον
C ἁλλομένης ὄψις ἐν αὐτῷ τῷ πεφωτισμένῳ κατὰ τὴν ἀνάκλασιν τόπῳ γένηται, τὰ τρία καθορᾷ, τήν τ' ἀνακλωμένην αὐγὴν καὶ τὸ ποιοῦν ὕδωρ τὴν ἀνάκλασιν καὶ τὸν ἥλιον αὐτὸν ἀφ' οὗ τὸ φῶς τῷ ὕδατι προσπῖπτον ἀνακέκλασται. τούτων δ' ὁμολογουμένων καὶ φαινομένων κελεύουσι τοὺς ἀνακλάσει φωτίζεσθαι τὴν γῆν ὑπὸ τῆς σελήνης ἀξιοῦντας ἐπιδεικνύναι νύκτωρ ἐμφαινόμενον τῇ σελήνῃ τὸν ἥλιον ὥσπερ ἐμφαίνεται τῷ ὕδατι μεθ' ἡμέραν[1] ὅταν ἀνάκλασις ἀπ'[2] αὐτοῦ γένηται· μὴ φαινομένου δὲ τούτου κατ' ἄλλον οἴονται τρόπον οὐκ ἀνακλάσει γίγνεσθαι τὸν φωτισμόν· εἰ δὲ μὴ
D τοῦτο, μηδὲ γῆν εἶναι τὴν σελήνην." "τί οὖν" ἔφη "πρὸς αὐτοὺς λεκτέον" ὁ Ἀπολλωνίδης. "κοινὰ γὰρ ἔοικε καὶ πρὸς ἡμᾶς εἶναι τὰ τῆς

[1] E ; μεθημέραν -B.
[2] Wyttenbach (implied by version of Kepler) ; ὑπ' -E, B.

[a] *i.e.* the image of the sun in the water or the reflecting surface.

[b] *i.e.* by the Stoics ; *cf. e.g.* the argument of Cleomedes (ii. 4. 101-102 [p. 184. 4 ff., Ziegler]) against the explanation of the moon's light as reflection. The following argument in this passage is printed by von Arnim, *S.V.F.* ii, p. 199 as frag. 675 of Chrysippus.

[c] For the idiom, κοινὸν καὶ πρός τινα εἶναι, *cf. Lucullus*,

positions of the shadowy and brilliant parts by reason of the contrast do not escape our sight.

23. There is this, however," I said, " which seems to be a stronger objection to the alleged reflection from the moon. It happens that those who have placed themselves in the path of reflected rays see not only the object illuminated but also what illuminates it. For example, if when a ray of light rebounds from water to a wall the eye is situated in the place that is itself illuminated by the reflection, the eye discerns all three things, the reflected ray and the water that causes the reflection and the sun itself,[a] the source of the light which has been reflected by impinging upon the water. On the basis of these admitted and apparent facts those who maintain that the moon illuminates the earth with reflected light are bidden (by their adversaries) [b] to point out in the moon at night an appearance of the sun such as there is in water by day whenever there is a reflection of the sun from it. Since there is no such appearance, (these adversaries) think that the illumination comes about in another way and not by reflection and that, if there is not reflection, neither is the moon an earth." " What response must be made to them then ? " said Apollonides, " for the characteristics of reflection seem to present us with a problem in common." [c]

44 (521 A) and 45 (522 B). Apollonides is a geometer (*cf.* 920 F and 925 A-B *supra*) who had expressed admiration for Clearchus's theory of reflection from the moon (*cf.* 921 B *supra*); by καὶ πρὸς ἡμᾶς here he means that the objection just raised to reflection from the moon constitutes a difficulty for the theory which he has espoused as well as for that of Lamprias and Lucius which he has just attacked. Lamprias in his reply, however, contends that the physical characteristics of the moon on his theory, the very characteristics to which Apollonides has just objected (935 D-E), will explain why the

(936) ἀνακλάσεως." "ἀμέλει τρόπον τινὰ" ἔφην ἐγὼ "κοινά, τρόπον δ' ἄλλον οὐδὲ[1] κοινά. πρῶτον δ' ὅρα τὰ τῆς εἰκόνος ὡς ἄνω ποταμῶν καὶ τραπέμπαλιν[2] λαμβάνουσιν. ἐπὶ γῆς γάρ ἐστι[3] καὶ κάτω τὸ ὕδωρ ὑπὲρ γῆς δὲ σελήνη καὶ μετέωρος· ὅθεν ἀντίστροφον αἱ κεκλασμέναι τὸ σχῆμα τῆς γωνίας ποιοῦσι, τῆς μὲν ἄνω πρὸς τῇ σελήνῃ τῆς δὲ κάτω πρὸς τῇ γῇ τὴν κορυφὴν ἐχούσης.[4] μὴ ἅπασαν οὖν ἰδέαν κατόπτρου[5] μηδ' ἐκ πάσης ἀποστάσεως
E ὁμοίαν ἀνάκλασιν ποιεῖν ἀξιούτωσαν, ἐπεὶ μάχονται πρὸς τὴν ἐνάργειαν.[6] οἱ δὲ σῶμα μὴ λεπτὸν μηδὲ λεῖον, ὥσπερ ἐστὶ τὸ ὕδωρ, ἀποφαίνοντες τὴν σελήνην ἀλλ' ἐμβριθὲς καὶ γεῶδες οὐκ οἶδ' ὅπως ἀπαιτοῦνται τοῦ ἡλίου τὴν ἔμφασιν ἐν αὐτῇ πρὸς τὴν ὄψιν. οὐδὲ γὰρ τὸ γάλα τοὺς τοιούτους ἐσοπτρισμοὺς ἀποδίδωσιν οὐδὲ ποιεῖ τῆς ὄψεως ἀνακλάσεις διὰ τὴν ἀνωμαλίαν καὶ τραχύτητα τῶν μορίων· πόθεν γε τὴν σελήνην δυνατόν ἐστιν ἀναπέμπειν ἀφ' ἑαυτῆς τὴν ὄψιν ὥσπερ ἀναπέμπει τὰ λειότερα τῶν ἐσόπτρων;[7] καίτοι καὶ ταῦτα δή-
F πουθεν, ἐὰν ἀμυχή τις ἢ ῥύπος ἢ τραχύτης κατα-

[1] B: οὐ -E.
[2] Meineke (*cf.* 924 c *supra*): τραπὲν πάλιν -E, B.
[3] Wyttenbach (after Xylander's version): πάρεστι -E, B.
[4] E: πρὸς τὴν κορυφὴν τῇ γῇ ἐχούσης -B (with β over τὴν and α over τῇ).
[5] H. C. (*cf. e.g. Demetrius*, 21 [898 B]: πᾶσαν ἰδέαν μάχης); κάτοπτρον -E, B; κατόπτρων -Emperius.
[6] Basiliensis; ἐνέργειαν -E, B.
[7] B; ἐσόπρων -E.

objection does not really make the difficulty for his theory that it would for that of Clearchus.

"In common in a way certainly," said I, "but in another way not in common either. In the first place consider the matter of the image,[a] how topsy-turvy and like 'rivers flowing uphill'[b] they conceive it. The fact is that the water is on earth and below, and the moon above the earth and on high; and hence the angles produced by the reflected rays are the converse of each other, the one having its apex above at the moon, the other below at the earth.[c] So they must not demand that every kind of mirror or a mirror at every distance produce a similar reflection, since (in doing so) they are at variance with the manifest facts. Those, on the other hand, who declare that the moon is not a tenuous or a smooth body as water is but a heavy and earthy one,[d] I do not understand why it is required of them that the sun be manifest to vision in her. For milk does not return such mirrorings either or produce reflections of the visual ray, and the reason is the irregularity and roughness of its particles[e]; how in the world then is it possible for the moon to cast the visual ray back from herself in the way that the smoother mirrors do? Yet even these, of course, are occluded if a scratch or speck of dirt or roughness covers the point

[a] *i.e.* the reflected image, not "the simile," as Amyot and Prickard interpret it.

[b] For the proverbial expression *cf.* Hesychius, *s.v.* ἄνω ποταμῶν; Euripides, *Medea*, 410; Lucian, *Dialogi Mortuorum*, 6. 2.

[c] As Kepler says in his note 64 *ad loc.*, "ratio nihil ad rem."

[d] *i.e.* those who hold the view of the moon's nature that Lamprias himself espouses.

[e] *Cf. Quaest. Conviv.* 696 A: and observe that the phrase, ἀνωμαλία καὶ τραχύτης, used here of milk is in 930 D *supra* and 937 A *infra* applied to the moon.

(936) λάβῃ τὸ σημεῖον [ἂν][1] ἀφ' οὗ πέφυκεν ἡ ὄψις ἀνακλᾶσθαι,[2] τυφλοῦται[3] καὶ βλέπεται μὲν αὐτὰ τὴν δ' ἀνταύγειαν οὐκ ἀποδίδωσιν. ὁ δ' ἀξιῶν ἢ καὶ τὴν ὄψιν ἡμῶν ἐπὶ τὸν ἥλιον ἢ μηδὲ τὸν ἥλιον ἐφ' ἡμᾶς ἀνακλᾶν ἀφ' ἑαυτῆς τὴν σελήνην ἡδύς ἐστι τὸν ὀφθαλμὸν ἥλιον ἀξιῶν εἶναι φῶς δὲ τὴν ὄψιν οὐρανὸν δὲ τὸν ἄνθρωπον. τοῦ μὲν γὰρ ἡλίου δι' εὐτονίαν καὶ λαμπρότητα πρὸς τῇ σελήνῃ γιγνομένην μετὰ πληγῆς τὴν ἀνάκλασιν φέρεσθαι πρὸς ἡμᾶς εἰκός ἐστιν, ἡ δ' ὄψις ἀσθενὴς οὖσα καὶ λεπτὴ καὶ ὀλιγοστὴ τί θαυμαστὸν εἰ μήτε πληγὴν ἀνακρουστικὴν ποιεῖ μήτ' ἀφαλλομένη[4] τηρεῖ τὴν
937 συνέχειαν ἀλλὰ θρύπτεται καὶ ἀπολείπει πλῆθος οὐκ ἔχουσα φωτὸς ὥστε μὴ διασπᾶσθαι περὶ τὰς ἀνωμαλίας καὶ τραχύτητας; ἀπὸ μὲν γὰρ ὕδατος καὶ τῶν ἄλλων ἐσόπτρων ἰσχύουσαν ἔτι τῆς ἀρχῆς ἐγγὺς οὖσαν ἐπὶ τὸν ἥλιον ἅλλεσθαι τὴν ἀνάκλασιν οὐκ ἀδύνατόν ἐστιν· ἀπὸ δὲ τῆς σελήνης, κἂν γίγνωνταί τινες ὀλισθήσεις αὐτῆς, ἀσθενεῖς ἔσονται καὶ ἀμυδραὶ καὶ προαπολείπουσαι διὰ τὸ μῆκος τῆς ἀποστάσεως. καὶ γὰρ ἄλλως τὰ μὲν κοῖλα

[1] Excised by Wyttenbach.
[2] Bernardakis ; ἀνακλασθὲν -E, B.
[3] Emperius ; τυποῦται -E, B.
[4] Madvig (implied by version of Xylander) ; ἀφαλλομένης -E, B.

[a] For the phenomenon referred to *cf.* [Ptolemy], *De Speculis*, vi = Hero Alexandrinus, *Opera*, ii. 1, p. 330. 4-22 (Nix-Schmidt). For τυφλόω meaning to deaden, muffle, occlude *cf. De Defectu Oraculorum*, 434 c, *Quaest. Conviv.* 721 B, *De Esu Carnium*, 995 F.

from which the visual ray is naturally reflected, and while the mirrors themselves are seen they do not return the customary reflection.[a] One who demands that the moon either reflect our vision from herself to the sun as well or else not reflect the sun from herself to us either is naïve, for he is demanding that the eye be a sun, the vision light, and the human being a heaven. Since the light of the sun because of its intensity and brilliance arrives at the moon with a shock, it is reasonable that its reflection should reach to us ; but the visual ray, since it is weak and tenuous and many times slighter, what wonder if it does not have an impact that produces recoil or if in rebounding it does not maintain its continuity but is dispersed and exhausted, not having light enough to keep it from being scattered about the irregularities and corrugations (of the moon) ? From water, to be sure, and from mirrors of other kinds it is not impossible for the reflection (of the visual ray) to rebound to the sun, since it is still strong because it is near to its point of origin[b] ; but from the moon, even if the visual rays do in some cases glance off, they will be weak and dim and prematurely exhausted because of the magnitude of the distance.[c] What is more too, whereas mirrors that are concave make

[b] Plutarch has to explain how the image of the sun can be seen in water and mirrors though it is not seen in the moon, and he does so by stressing the proximity of the former to the "point of origin." This "point of origin" can only be our eyes, so that he must be thinking of the visual ray as reflected from water and mirrors *to the sun* and as failing to be reflected from the moon to the sun. The reading of the mss., ἐπὶ τὸν ἥλιον, is necessary to the argument and all suggestions for altering it are wrong.

[c] *i.e.* the distance from the eye to the reflecting surface of the moon.

(937) τῶν ἐσόπτρων εὐτονωτέραν ποιεῖ τῆς προηγουμένης αὐγῆς τὴν ἀνακλωμένην ὥστε καὶ φλόγας ἀναπέμπειν πολλάκις, τὰ δὲ κυρτὰ καὶ τὰ[1] σφαι-
B ροειδῆ τῷ μὴ πανταχόθεν ἀντερείδειν ἀσθενῆ καὶ ἀμαυρὰν ⟨αὐτὴν ἀναδίδωσιν.⟩[2] ὁρᾶτε[3] δήπουθεν, ὅταν ἴριδες δύο φανῶσι νέφους νέφος ἐμπεριέχοντος, ἀμαυρὰ[4] ποιοῦσαν καὶ ἀσαφῆ τὰ χρώματα τὴν περιέχουσαν· τὸ γὰρ ἐκτὸς νέφος ἀπωτέρω τῆς ὄψεως κείμενον οὐκ εὔτονον οὐδ' ἰσχυρὰν τὴν ἀνάκλασιν ἀποδίδωσι. καὶ τί δεῖ πλείονα λέγειν; ὅπου γὰρ τὸ τοῦ ἡλίου φῶς ἀνακλώμενον ἀπὸ τῆς σελήνης τὴν μὲν θερμότητα πᾶσαν ἀποβάλλει τῆς δὲ λαμπρότητος αὐτοῦ λεπτὸν ἀφικνεῖται μόλις πρὸς ἡμᾶς καὶ ἀδρανὲς λείψανον, ἦπου[5] τῆς ὄψεως τὸν ἴσον[6] φερομένης δίαυλον ἐνδέχεται μόριον ὁτιοῦν
C λειψάνου[7] ἐξικέσθαι πρὸς τὸν ἥλιον ἀπὸ[8] τῆς σελήνης; ἐγὼ μὲν οὐκ οἶμαι. σκοπεῖτε δ'" εἶπον "καὶ ὑμεῖς. εἰ ταὐτὰ πρὸς τὸ ὕδωρ καὶ τὴν σελήνην ἔπασχεν ἡ ὄψις, ἔδει[9] καὶ γῆς καὶ φυτῶν καὶ ἀνθρώπων καὶ ἄστρων ἐμφάσεις ποιεῖν τὴν πανσέληνον, οἵας τὰ λοιπὰ ποιεῖται τῶν ἐσόπτρων. εἰ δ' οὐ γίγνονται πρὸς ταῦτα τῆς ὄψεως ἀνακλάσεις

[1] E : καὶ σφαιροειδῆ -B.
[2] Adler ; ἀμαυρὰν vac. 14-E, 18-B.
[3] Turnebus ; ὁρᾶται -E, B.
[4] H. C. (implied by versions of Xylander, Amyot, and Kepler) ; ἀμαυρὰν -E, B.
[5] B ; ἤ που -E.
[6] B² ; τὴν ἴσην -E, B¹.
[7] H. C. (implied by version of Amyot) ; λείψανον -E, B.
[8] Wyttenbach (implied by versions of Amyot and Kepler) ; ὑπὸ -E, B.
[9] Turnebus ; ὁ δὴ -E, B.

[a] For the concave burning-glass *cf.* [Euclid], *Catoptrica*, Prop. 30 (Euclid, *Opera Omnia*, vii, pp. 340-342 [Heiberg]).

the ray of light more intense after reflection than it was before so as often even to send off flames,[a] convex and spherical mirrors [b] by not exerting counter-pressure upon it from all points ⟨give it off⟩ weak and faint. You observe, I presume, whenever two rainbows appear, as one cloud encloses another, that the encompassing rainbow produces colours that are faint and indistinct. The reason for this is that the outer cloud, being situated further off from the eye, returns a reflection that is not intense or strong.[c] Nay, what need of further arguments? When the light of the sun by being reflected from the moon loses all its heat [d] and of its brilliance there barely reaches us a slight and feeble remnant, is it really possible that of the visual ray travelling the same double-course [e] any fraction of a remnant should from the moon arrive at the sun? For my part, I think not; and do you too," I said, "consider this. If the visual ray were affected in the same way by water and by the moon, the full moon ought to show such reflections of the earth and plants and human beings and stars as all other mirrors do; but, if there occur no reflections of the visual ray to these objects either

[b] Not *two* kinds of mirrors, as Raingeard says *ad loc.*, but *one*, "convex, *i.e.* convex spherical," for (1) spherical mirrors that are *concave* are the burning-glasses in the preceding category, and (2) convex mirrors that are not spherical would not provide the obvious analogy with the moon that is wanted.

[c] On the double rainbow and the reason why the outer bow is less distinct *cf.* Aristotle, *Meteorology*, 375 a 30–b 15. Aristotle's explanation, which Plutarch here adopts, is attacked by Kepler in a long note on the present passage (note 70).

[d] See note *a* on 929 E *supra*.

[e] The moon is thought of as the καμπτήρ or turning-post in the stadium. The sun's rays travel from sun to moon to eye, and the visual ray would have to travel the same course in reverse.

(937) δι' ἀσθένειαν αὐτῆς ἢ τραχύτητα τῆς σελήνης, μηδὲ πρὸς τὸν ἥλιον ἀπαιτῶμεν.

24. 'Ημεῖς μὲν οὖν" ἔφην "ὅσα μὴ διαπέφευγε τὴν μνήμην τῶν ἐκεῖ λεχθέντων ἀπηγγέλκαμεν. ὥρα δὲ καὶ Σύλλαν παρακαλεῖν, μᾶλλον δ' ἀπαιτεῖν τὴν διήγησιν, οἷον ἐπὶ ῥητοῖς ἀκροατὴν γεγενημένον. ὥστε, εἰ δοκεῖ, καταπαύσαντες τὸν περί-
D πατον καὶ καθίσαντες ἐπὶ τῶν βάθρων ἑδραῖον αὐτῷ παράσχωμεν ἀκροατήριον." ἔδοξε δὴ ταῦτα, καὶ καθισάντων ἡμῶν ὁ Θέων "ἐγώ τοι, ὦ Λαμπρία," εἶπεν "ἐπιθυμῶ μὲν οὐδενὸς ἧττον ὑμῶν ἀκοῦσαι τὰ λεχθησόμενα, πρότερον δ' ἂν ἡδέως ἀκούσαιμι περὶ τῶν οἰκεῖν λεγομένων ἐπὶ τῆς σελήνης, οὐκ εἰ κατοικοῦσί τινες ἀλλ' εἰ δυνατὸν ἐκεῖ κατοικεῖν. εἰ γὰρ οὐ δυνατόν, ἄλογον καὶ τὸ γῆν εἶναι τὴν σελήνην· δόξει γὰρ πρὸς οὐδὲν ἀλλὰ μάτην γεγονέναι μήτε καρποὺς ἐκφέρουσα μήτ' ἀνθρώποις τισὶν ἕδραν παρέχουσα καὶ γένεσιν καὶ
E δίαιταν, ὧν ἕνεκα καὶ ταύτην γεγονέναι φαμὲν κατὰ Πλάτωνα 'τροφὸν[1] ἡμετέραν, ἡμέρας τε καὶ νυκτὸς ἀτρεκῆ φύλακα καὶ δημιουργόν.' ὁρᾷς δ' ὅτι

[1] Stephanus (1624), *cf. Timaeus*, 40 B; τροφὴν -E, B.

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[a] See 921 F, 929 B, 929 F *supra*.

[b] In *De Placitis*, 892 A = Aëtius, ii. 30. 1 this notion is ascribed to the Pythagoreans (and in the version of Stobaeus specifically to Philolaüs). Diogenes Laertius, ii. 8 ascribes it to Anaxagoras—if on the basis of frag. B 4 (ii, p. 34. 5 ff. [Diels-Kranz]), wrongly; and Cicero's ascription of it to Xenophanes (*Acad. Prior.* II. xxxix. 123) is certainly an error (despite Lactantius, *Div. Inst.* iii. 23. 12) but more probably due to confusion with Xenocrates than, as is usually said, a mistake for Anaxagoras (*cf.* J. S. Reid *ad loc.*; Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 125. 40; Diels, *Dox. Graeci*, p. 121, n. 1). The "moon-dwellers" became characters of "scien-

because of the weakness of the ray or the ruggedness of the moon, let us not require that there be such reflection to the sun either.

24. So we for our part," said I, "have now reported as much of that conversation [a] as has not slipped our mind; and it is high time to summon Sulla or rather to demand his narrative as the agreed condition upon which he was admitted as a listener. So, if it is agreeable, let us stop our promenade and sit down upon the benches, that we may provide him with a settled audience." To this then they agreed; and, when we had sat down, Theon said: "Though, as you know, Lamprias, I am as eager as any of you to hear what is going to be said, I should like before that to hear about the beings that are said to dwell on the moon [b]—not whether any really do inhabit it but whether habitation there is possible. If it is not possible, the assertion that the moon is an earth is itself absurd, for she would then appear to have come into existence vainly and to no purpose, neither bringing forth fruit nor providing for men of some kind an origin, an abode, and a means of life, the purposes for which this earth of ours came into being, as we say with Plato, 'our nurse, strict guardian and artificer of day and night.' [c] You see that there is

tific fiction" at least as early as Herodorus of Heraclea (*cf.* Athenaeus, ii. 57 f).

[c] *Timaeus*, 40 B-C. Though ἀτρεκῆ does not appear there, it is introduced into the passage by Plutarch at 938 E *infra* and at *Plat. Quaest.* 1006 E, which indicates that he meant it as part of the quotation. Since there appears to be no other reference to the words τροφὸν ἡμετέραν in Plutarch's extant works, one cannot be sure that τροφήν here is not his own misquotation rather than a scribal error. (The phrase, τροφαῖς ζῴων, in *De Superstitione*, 171 A is probably not part of the adaptation of the *Timaeus*-passage there.)

(937) πολλὰ λέγεται καὶ σὺν γέλωτι καὶ μετὰ σπουδῆς περὶ τούτων. τοῖς μὲν γὰρ ὑπὸ τὴν σελήνην οἰκοῦσιν ὥσπερ Ταντάλοις ὑπὲρ[1] κεφαλῆς ἐπικρέμασθαί[2] φασι τοὺς δ' οἰκοῦντας αὖ πάλιν ἐπ' αὐτῆς, ὥσπερ F Ἰξίονας ἐνδεδεμένους ῥύμῃ τοσ⟨αύτῃ, τῆς καταφορᾶς κωλύειν τὴν κύκλῳ περιδίνησιν.⟩[3] καίτοι μίαν οὐ κινεῖται κίνησιν ἀλλ', ὥς που καὶ λέγεται, Τριοδῖτίς ἐστιν, ἅμα μῆκος ἐπὶ τοῦ ζῳδιακοῦ καὶ πλάτος ἀντιφερομένη[4] καὶ βάθος· ὧν τὴν μὲν περιδρομὴν τὴν δ' ἕλικα τὴν δ' οὐκ οἶδα πῶς ἀνωμαλίαν ὀνομάζουσιν οἱ μαθηματικοί, καίπερ οὐδεμίαν ὁμαλὴν οὐδὲ τεταγμένην ταῖς ἀποκαταστάσεσιν ὁρῶντες ἔχουσαν.[5] οὔκουν[6] εἰ λέων τις ἔπεσεν ὑπὸ ῥύμης

[1] Stephanus (1624) ; ἐκ -E, B.
[2] H. C. (*cf. Class. Phil.* xlvi [1951], p. 155, n. 47) ; ἐκκρέμασθαί -E, B.
[3] H. C. (*cf. Class. Phil.* xlvi [1951], p. 146) ; τόση vac. 43-E, 30-B.
[4] H. C. (*cf. Class. Phil.* xlvi [1951], p. 146) ; φερομένη -E ; ἐπιφερομένη -B, Aldine, Basiliensis.
[5] B ; ἐχούσαις -E.
[6] Stephanus (1624) ; οὐκ -E, B.

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[a] *Cf.* the sarcastic remarks of Lucius in 923 c *supra*. For the "stone of Tantalus" *cf. Nostoi*, frag. x (=Athenaeus, 281 b-c) : Pindar, *Olympian*, i. 57-58 and *Isthmian*, viii. 10-11 ; and *Scholia in Olymp.* i. 91 a, where reference is made to the "interpretation" that the stone which threatens Tantalus is the sun, this being his punishment for having declared that the sun is an incandescent mass (*cf.* also scholiast on Euripides, *Orestes*, 982-986).

[b] For the myth of Ixion on his wheel *cf.* Pindar, *Pythian*, ii. 21-48 and for Ixion used in a cosmological argument *cf.* Aristotle, *De Caelo*, 284 a 34-35.

[c] An epithet of Hecate (*cf.* Athenaeus, vii. 325 a) applied to the moon only after she had been identified with the moon-goddess, after which her epithets had to be explained by

much talk about these things both in jest and seriously. It is said that those who dwell under the moon have her suspended overhead like the stone of Tantalus [a] and on the other hand that those who dwell upon her, fast bound like so many Ixions [b] by such great velocity, ⟨are kept from falling by being whirled round in a circle⟩. Yet it is not with a single motion that she moves ; but she is, as somewhere she is in fact called, the goddess of three ways,[c] for she moves on the zodiac against the signs in longitude and latitude and in depth at the same time. Of these movements the mathematicians call the first 'revolution,' the second 'spiral,' and the third, I know not why, 'anomaly,' although they see that she has no motion at all that is uniform and fixed by regular recurrences.[d] There is reason to wonder then not that the velocity caused a lion to fall on the Peloponnesus [e]

reference to lunar phenomena. *Cf. e.g.* Cleomedes, ii. 5. 111 (p. 202. 5-10 [Ziegler]) on τριπρόσωπος, and Cornutus, *Theologiae Graecae Compend.* 34 (p. 72. 7-15 [Lang]) on τρίμορφος and τριοδῖτις. The etymology here put into Theon's mouth had already been given by Varro in his *De Lingua Latina*, vii. 16. For the moon as Hecate *cf.* notes *b* on 942 D and *g* on 944 C *infra*.

[d] For the text, terminology, and intention of these two sentences *cf. Class. Phil.* xlvi (1951), pp. 146-147.

[e] *Cf.* Epimenides, frag. B 2 (i, p. 32. 22 ff. [Diels-Kranz]) ; Anaxagoras, frag. A 77 (ii, p. 24. 25-26 and 28-30 [Diels-Kranz]). It may be that Anaxagoras referred to this legend in connection with his theory concerning the meteoric stone of Aegospotami, the fall of which he is said to have "predicted" (*Lysander*, 12 [439 D-F] : Diogenes Laertius, ii. 10 ; Pliny, *Nat. Hist.* ii. 58 [59], 149-150). Kepler (note 77) suggests that the story of the lion falling from the sky may have arisen from a confusion of λάων (gen. pl. of λᾶας) and λέων or, as Prickard puts it, between λᾶς and λίς. Diogenes Laertius (viii. 72) quotes Timaeus to the effect that Heraclides Ponticus spoke of the fall of a man from the moon, an incident which

(937) εἰς Πελοπόννησον[1] ἄξιόν ἐστι θαυμάζειν ἀλλ' ὅπως[2] οὐ μυρί' ὁρῶμεν ἀεὶ

πεσήματ' ἀνδρῶν κἀπολακτισμοὺς βίων[3]

938 ἐκεῖθεν οἷον ἐκκυβιστώντων καὶ περιτραπέντων.[4] καὶ ⟨μὴν⟩[5] γελοῖον περὶ μονῆς[6] τῶν ἐκεῖ διαπορεῖν εἰ μὴ γένεσιν μηδὲ σύστασιν ἔχειν δύνανται.[7] ὅπου γὰρ Αἰγύπτιοι καὶ Τρωγλοδύται, οἷς ἡμέρας μιᾶς ἀκαρὲς ἵσταται κατὰ κορυφὴν ὁ ἥλιος ἐν τροπαῖς εἶτ' ἄπεισιν, ὀλίγον ἀπέχουσι τοῦ κατακεκαῦσθαι ξηρότητι τοῦ περιέχοντος, ἦπου τοὺς ἐπὶ τῆς σελήνης εἰκός ἐστι δώδεκα θερείας ὑπομένειν ἔτους ἑκάστου, κατὰ μῆνα τοῦ ἡλίου πρὸς κάθετον αὐτοῖς ἐφισταμένου καὶ στηρίζοντος ὅταν ᾖ πανσέληνος; πνεύματά γε μὴν καὶ νέφη καὶ ὄμβρους, ὧν χωρὶς
B οὔτε γένεσις φυτῶν ἔστιν οὔτε σωτηρία γενομένοις, ἀμήχανον ἐκεῖ διανοηθῆναι συνιστάμενα διὰ θερμότητα καὶ λεπτότητα τοῦ περιέχοντος· οὐδὲ γὰρ ἐνταῦθα τῶν ὀρῶν τὰ ὑψηλὰ δέχεται τοὺς ἀγρίους καὶ ἐναντίους χειμῶνας, ἀλλ⟨ὰ λεπτὸς ὢν⟩[8] ἤδη καὶ σάλον ἔχων ὑπὸ κουφότητος ὁ ἀὴρ ἐκφεύγει τὴν σύστασιν ταύτην καὶ πύκνωσιν. εἰ μὴ νὴ Δία φήσομεν ὥσπερ ἡ Ἀθηνᾶ τῷ Ἀχιλλεῖ νέκταρός τι

[1] B : πελοπόνησον -E.
[2] Turnebus ; ὅμως -E, B.
[3] B (*cf. De Curiositate*, 517 F) ; υἱῶν -E.
[4] Wyttenbach (*cf. De Vitando Aere Alieno*, 831 D : περιτραπείς) ; περιτρεπόντων -E, B ; περιρρεπόντων -Apelt (Jena, 1905).
[5] Dübner ; καὶ vac. 1-E ; καὶ γὰρ -B.
[6] Basiliensis ; μόνης -E, B.
[7] Wyttenbach ; δύναται -B ; δυναται -E.
[8] Bernardakis (*cf.* 939 B-C, 939 E *infra*) ; ἀλλ' vac. 9-E, 10-B.

Voss after Hirzel refers to a dialogue of his that may have

but how it is that we are not forever seeing countless

> Men falling headlong and lives spurned away,[a]

tumbling off the moon, as it were, and turned head over heels. It is moreover ridiculous to raise the question how the inhabitants of the moon remain there, if they cannot come to be or exist. Now, when Egyptians and Troglodytes,[b] for whom the sun stands in the zenith one moment of one day at the solstice and then departs, are all but burnt to a cinder by the dryness of the atmosphere, is it really likely that the men on the moon endure twelve summers every year, the sun standing fixed vertically above them each month at the full moon? Yet winds and clouds and rains, without which plants can neither arise nor having arisen be preserved, because of the heat and tenuousness of the atmosphere cannot possibly be imagined as forming there, for not even here on earth do the lofty mountains admit fierce and contrary storms [c] but the air, ⟨being tenuous⟩ already and having a rolling swell [d] as a result of its lightness, escapes this compaction and condensation. Otherwise, by Heaven, we shall have to say that, as Athena when Achilles was taking no food instilled into him

influenced Plutarch (Voss, *De Heraclidis Pontici Vita et Scriptis*, p. 61).

[a] Aeschylus, *Supplices*, 937; *cf. De Curiositate*, 517 F, where also Plutarch gives *βίων* instead of Aeschylus's *βίου*.

[b] *i.e.* Ethiopians: *cf.* Herodotus, iv. 183. 4; Strabo, ii. 5. 36 (c. 133).

[c] *Cf.* Aristotle, *Meteorology*, 340 b 36—341 a 4, 347 a 29-35, and Alexander, *Meteor.* p. 16. 6-15, where lines 10-11 guarantee and explain the *ἐναντίους* in Plutarch's text.

[d] *Cf.* 939 E *infra* and *Plat. Quaest.* 1005 E.

(938) καὶ ἀμβροσίας ἐνέσταξε μὴ προσιεμένῳ τροφὴν οὕτω τὴν σελήνην, Ἀθηνᾶν λεγομένην καὶ οὖσαν, τρέφειν τοὺς ἄνδρας ἀμβροσίαν ἀνιεῖσαν[1] αὐτοῖς ἐφημέριον, ὡς Φερεκύδης ὁ παλαιὸς οἴεται σιτεῖσθαι
C αὐτοὺς ⟨τοὺς⟩[2] θεούς. τὴν μὲν γὰρ Ἰνδικὴν ῥίζαν ἥν φησι Μεγασθένης τοὺς ⟨μήτ' ἐσθίοντας⟩[3] μήτε πίνοντας ἀλλ' ἀστόμους[4] ὄντας ὑποτύφειν καὶ θυμιᾶν καὶ τρέφεσθαι τῇ ὀσμῇ πόθεν ἄν τις ἐκεῖ φυομένην λάβοι, μὴ βρεχομένης τῆς σελήνης;"

25. Ταῦτα τοῦ Θέωνος εἰπόντος, ⟨"ὑπέρευ⟩ γ'"[5] ἔφην "καὶ ἄριστα τῇ παιδιᾷ τοῦ λόγου τὰς ὀφρῦς ⟨ἡμῶν καθῆκας, δι'⟩[6] ἃ καὶ θάρσος ἡμῖν ἐγγίγνεται πρὸς τὴν ἀπόκρισιν μὴ πάνυ πικρὰν[7] μηδ' αὐστηρὰν εὐθύνην προσδοκῶσι. καὶ γὰρ ὡς ἀληθῶς τῶν σφόδρα πεπεισμένων τὰ τοιαῦτα διαφέρουσιν ⟨οὐδὲν⟩[8] οἱ σφόδρα δυσκολαίνοντες αὐτοῖς καὶ διαπιστοῦντες ἀλλὰ μὴ πράως τὸ δυνατὸν καὶ τὸ ἐνδεχόμενον ἐθέλοντες ἐπισκοπεῖν. εὐθὺς οὖν τὸ

[1] Emperius ; ἀνεῖσαν -E, B.
[2] Wyttenbach ; αὐτοὺς θεούς -E, B.
[3] -Anon., Aldine, R.J. 94 (*cf.* Pliny, *Nat. Hist.* vii. 2. 25 : "nullum illis cibum nullumque potum") ; τοὺς μήτε πίνοντας -E, B.
[4] Basiliensis, Anon., Aldine, R.J. 94 ; εὐστόμους -E, B (*cf.* σύστομοι of both MSS. in 940 B *infra*).
[5] H. C. ; vac. 6-E, B γε.
[6] H. C. (*cf. Amatorius*, 753 B, *De Communibus Notitiis*, 1062 F) ; vac. 15-E, 12-B ἃ ; ⟨ἡμῶν ἀνῆκας, δι'⟩ ἃ -Wyttenbach.
[7] B² ; μικρὰν -E, B¹.
[8] Dübner (τοιαῦτα ⟨οὐδὲν⟩ διαφέρουσιν οἱ -Wyttenbach after Xylander's version) ; τοιαῦτα διαφέρουσιν, οἱ -E, B.

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[a] *Cf. Iliad*, xix. 340-356.
[b] See 922 A *supra* and note *c* there.
[c] = Pherecydes, frag. B 13 a (i, p. 51. 5-9 [Diels-Kranz]).
[d] Megasthenes, frag. 34 (*Frag. Hist. Graec.* ii, pp. 425-427

some nectar and ambrosia,[a] so the moon, which is Athena in name and fact,[b] nourishes her men by sending up ambrosia for them day by day, the food of ⟨the⟩ gods themselves as the ancient Pherecydes believes.[c] For even the Indian root which according to Megasthenes the Mouthless Men, who ⟨neither eat⟩ nor drink, kindle and cause to smoulder and inhale for their nourishment,[d] how could it be supposed to grow there if the moon is not moistened by rain ? "

25. When Theon had so spoken, I said " ⟨Bravo⟩, you have most excellently ⟨smoothed our⟩ brows by the sport of your speech, wherefore we have been inspired with boldness to reply, since we anticipate no very sharp or bitter scrutiny. It is, moreover, a fact that there really is ⟨no⟩ difference between those who in such matters are firm believers and those who are violently annoyed by them and firmly disbelieve and refuse to examine calmly what can be and what might be.[e] So, for example, in the first

[Müller]) ; *cf.* Strabo, ii. 1. 9 (c. 70) and xv. 1. 57 (c. 711) ; Pliny, *Nat. Hist.* vii. 2. 25. Aristotle (*Parva Nat.* 445 a 16-17) mentions the belief of certain Pythagoreans that some animals are nourished by odours ; *cf.* the story told of Democritus, frags. A 28 and 29 (ii, p. 89. 23 ff. [Diels-Kranz]), and Lucian on the Selenites (*Vera Hist.* i. 23), a passage which, however, looks like a parody of Herodotus, i. 202. 2.

[e] Strictly, the potential and the contingent ; but probably Plutarch meant his phrase here to imply only " the possible " in all its senses and intended no technical distinction between δυνατόν and ἐνδεχόμενον. Certainly one cannot ascribe to him the distinction drawn in the pseudo-Plutarchean *De Fato*, 570 E—571 E ; *n.b.* that in *De Stoicorum Repugnantiis*, 1055 D-F he attacks the Chrysippean doctrine of δυνατόν. On δυνατόν and ἐνδεχόμενον as used by Aristotle *cf.* Ross, Aristotle's *Metaphysics*, ii, p. 245 *ad* 1046 b 26, and Faust, *Der Möglichkeitsgedanke*, i, pp. 175 ff. ; for the attitude of the Hellenistic philosophers, Faust, *op. cit.* i, pp. 209 ff.

(938) πρῶτον οὐκ ἀναγκαῖόν ἐστιν, εἰ μὴ κατοικοῦσιν
D ἄνθρωποι τὴν σελήνην, μάτην γεγονέναι καὶ πρὸς μηδέν. οὐδὲ γὰρ τήνδε τὴν γῆν δι' ὅλης ἐνεργὸν οὐδὲ προσοικουμένην ὁρῶμεν, ἀλλὰ μικρὸν αὐτῆς μέρος ὥσπερ ἄκροις τισὶν ἢ χερρονήσοις[1] ἀνέχουσιν ἐκ βυθοῦ γόνιμόν ἐστι ζῴων καὶ φυτῶν τῶν δ' ἄλλων τὰ μὲν ἔρημα καὶ ἄκαρπα χειμῶσι καὶ αὐχμοῖς τὰ δὲ πλεῖστα κατὰ τῆς μεγάλης δέδυκε θαλάσσης. ἀλλὰ σὺ τὸν Ἀρίσταρχον ἀγαπῶν ἀεὶ καὶ θαυμάζων οὐκ ἀκούεις Κράτητος ἀναγιγνώσκοντος[2]

Ὠκεανός, ὅσπερ γένεσις πάντεσσι τέτυκται
ἀνδράσιν ἠδὲ θεοῖς, πλείστην ἐπὶ[3] γαῖαν ἵησιν.[4]

ἀλλὰ πολλοῦ δεῖ μάτην ταῦτα γεγονέναι· καὶ γὰρ
E ἀναθυμιάσεις ἡ θάλασσα μαλακὰς ἀνίησι, καὶ τῶν πνευμάτων τὰ ἥδιστα θέρους ἀκμάζοντος ἐκ τῆς ἀοικήτου καὶ κατεψυγμένης αἱ χιόνες ἀτρέμα διατηκόμεναι χαλῶσι καὶ διασπείρουσιν. 'ἡμέρας τε καὶ νυκτὸς' ἕστηκεν 'ἀτρεκὴς' ἐν μέσῳ 'φύλαξ'

[1] E; χερονήσοις -B.
[2] ἀναγινώσκοντος -E: ἀναγινώσκων -B.
[3] πλείστην ⟨δ'⟩ ἐπὶ -Leaf *ad Iliad.* xiv. 246.
[4] Wyttenbach (1831): ἴησιν -E, B.

[a] For the uninhabitability of the arctic and torrid zones *cf.* besides *De Iside*, 367 D Strabo, ii. 3. 1 (c. 96) and Cleomedes, i. 2. 12 (p. 22. 11-14 [Ziegler]); and for the connection of this theory with the notion that the greatest part of the outer ocean is in the torrid zone *cf.* Cleomedes, i. 6. 33 (p. 60. 21-24). This was *not* the opinion of Posidonius (Cleomedes, *ibid.* and i. 6. 31-32 [p. 58. 4-25]); it was the geography of Cleanthes, which Crates sought to impose upon Homer (*cf.* Geminus, xvi. 21 ff. [p. 172. 11 ff., Manitius]; Kroll, *R.E.* xi. 1637 *s.v.* "Krates"; Susemihl, *Geschichte der griech.*

place, if the moon is not inhabited by men, it is not necessary that she have come to be in vain and to no purpose, for we see that this earth of ours is not productive and inhabited throughout its whole extent either but only a small part of it is fruitful of animals and plants on the peaks, as it were, and peninsulas rising out of the deep, while of the rest some parts are desert and fruitless with winter-storms and summer-droughts and the most are sunk in the great sea. You, however, because of your constant fondness and admiration for Aristarchus, give no heed to the text that Crates read :

> Ocean, that is the universal source
> Of men and gods, spreads over most of earth.[a]

Yet it is by no means for nothing that these parts have come to be. The sea gives off gentle exhalations, and the most pleasant winds when summer is at its height are released and dispersed from the uninhabited and frozen region by the snows that are gradually melting there.[b] 'A strict guardian and artificer of day and night' has according to Plato[c]

Litteratur in der Alexandrinerzeit, ii, pp. 5 ff.). Since the first line quoted by Plutarch is *Iliad*, xiv. 246 of our text of Homer (with ὠκεανοῦ instead of ὠκεανός) but the second line does not occur, the latter was probably an interpolation made by Crates to support his "interpretation" of Homer's geography ; for Crates' textual alterations and for the controversy between him and Aristarchus *cf.* Susemihl, *op. cit.* i, p. 457 and ii, p. 7, n. 33 ; Kroll, *loc. cit.* 1640 ; Christ-Schmid-Stählin[6], ii. 1, p. 270 ; Mette, *Sphairopoiia*. pp. 60 ff.

[b] *Cf.* Theophrastus, *De Ventis*, ii, § 11, and Aristotle, *Meteorology*, 364 a 5-13. For ἡ ἀοίκητος without a noun = "the uninhabited world" *cf. Adv. Coloten*, 1115 A.

[c] Lamprias retorts upon Theon an adaptation of his own quotation of *Timaeus*, 40 B-C ; *cf.* 937 E *supra* and note *c* there.

(938) κατὰ Πλάτωνα ‘καὶ δημιουργός.’ οὐδὲν οὖν κωλύει καὶ τὴν σελήνην ζῴων μὲν ἔρημον εἶναι παρέχειν δ᾿ ἀνακλάσεις τε[1] τῷ φωτὶ περὶ αὐτὴν[2] διαχεομένῳ καὶ συρροὴν ταῖς τῶν ἀστέρων αὐγαῖς
F ἐν αὐτῇ[3] καὶ σύγκρασιν, ᾗ συνεκπέττει τε τὰς ἀπὸ τῆς γῆς ἀναθυμιάσεις ἅμα τε[4] καὶ τοῦ ἡλίου[5] τὸ ἔμπυρον ἄγαν καὶ σκληρὸν ἀνίησι.[6] καί πού[7] τι καὶ παλαιᾷ φήμῃ διδόντες Ἄρτεμιν αὐτὴν[8] νομισθῆναι φήσομεν ὡς παρθένον καὶ ἄγονον ἄλλαις[9] δὲ βοηθητικὴν καὶ ὠφέλιμον. ἔπειτα[10] τῶν γ᾿ εἰρημένων οὐδέν, ὦ φίλε[11] Θέων, ἀδύνατον δείκνυσι τὴν λεγομένην ἐπ᾿ αὐτῆς οἴκησιν· ἥ τε γὰρ δίνη πολλὴν ἔχουσα πραότητα καὶ γαλήνην ἐπιλεαίνει τὸν ἀέρα
939 καὶ διανέμει[12] συγκατακοσμούμενον ὥστε μηδὲν εἶναι δέος ἐκπεσεῖν καὶ ἀποσφαλῆναι τοὺς ἐκεῖ βεβηκότας.[13] εἰ δὲ μηδ᾿ ἁπλῆ,[14] καὶ τὸ ποικίλον τοῦτο τῆς φορᾶς καὶ πεπλανημένον οὐκ ἀνωμαλίας οὐδὲ ταραχῆς ἐστιν ἀλλὰ θαυμαστὴν ἐπιδείκνυνται[15] τάξιν ἐν τούτοις καὶ πορείαν οἱ ἀστρολόγοι, κύκλοις τισὶ περὶ κύκλους ἑτέρους ἐξελιττομένοις συνάγοντες αὐτὴν οἱ μὲν ἀτρεμοῦσαν οἱ δὲ λείως καὶ ὁμαλῶς

[1] E ; omitted by B.
[2] H. C. ; αὐτὴν -E, B.
[3] H. C. ; αὐτῇ -E, B.
[4] B ; omitted by E.
[5] Wyttenbach ; τῷ ἡλίῳ -E, B.
[6] Wyttenbach ; ἀφίησι -E, B.
[7] Wyttenbach ; καὶ πολύ -E, B.
[8] B ; αὐτ vac. 4-E.
[9] H. C. (ἄλλοις -Wyttenbach) ; ἄλλως -E, B.
[10] Hutten ; ἐπεὶ -E, B.
[11] Xylander ; ὠφελεῖν -E, B.
[12] Wyttenbach ; διαμένει -E, B.

been stationed in the centre. Nothing then prevents the moon too, while destitute of living beings, from providing reflections for the light that is diffused about her and for the rays of the stars a point of confluence in herself and a blending whereby she digests the exhalations from the earth and at the same time slackens the excessive torridity and harshness of the sun.[a] Moreover, conceding a point perhaps to ancient tradition also, we shall say that she was held to be Artemis on the ground that she is a virgin and sterile but is helpful and beneficial to other females.[b] In the second place, my dear Theon, nothing that has been said proves impossible the alleged inhabitation of the moon. As to the rotation, since it is very gentle and serene, it smooths the air and distributes it in settled order, so that there is no danger of falling and slipping off for those who stand there. And if it is not simple either,[c] even this complication and variation of the motion is not attributable to irregularity or confusion ; but in them astronomers demonstrate a marvellous order and progression, making her revolve with circles that unroll about other circles, some assuming that she is herself motionless and others that she retrogresses smoothly and regularly

[a] *Cf.* 928 c *supra.*

[b] For moon = Artemis *cf.* 922 A *supra* and note *b* there ; for the virgin goddess of childbirth *cf.* besides the references there Plato, *Theaetetus*, 149 B, and Cornutus, 34 (p. 73. 18 ff. [Lang]).

[c] This refers to 937 F *supra.* For the use of ἁπλῆ " simple " in this context *cf.* Cleomedes, i. 4. 19 (p. 34. 20 [Ziegler]) and Theon of Smyrna, p. 150. 21-23 (Hiller).

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13 Turnebus ; βεβιωκότας -E, B.
14 H. C. ; εἰ δὲ μὴ δὲ αὐτῇ -E, B.
15 Basiliensis ; ἐπιδείκνυται -E, B.

(939) ἀεὶ τάχεσι τοῖς αὐτοῖς ἀνθυποφερομένην· αὗται γὰρ αἱ τῶν κύκλων ἐπιβάσεις καὶ περιαγωγαὶ καὶ σχέσεις πρὸς ἀλλήλους καὶ πρὸς ἡμᾶς τὰ φαινόμενα τῆς κινήσεως ὕψη καὶ βάθη καὶ τὰς κατὰ πλάτος
B παραλλάξεις ἅμα ταῖς κατὰ μῆκος αὐτῆς περιόδοις ἐμμελέστατα συμπεραίνουσι.[1] τὴν δὲ πολλὴν θερμότητα καὶ συνεχῆ πύρωσιν ὑφ' ἡλίου παύσῃ[2] φοβούμενος ἂν πρῶτον μὲν ἀντιθῇς[3] ταῖς δώδεκα[4] θεριναῖς πανσελήνοις τὰς συνόδους[5] ὑποθῇ[6] δὲ τὸ συνεχὲς τῆς μεταβολῆς ταῖς ὑπερβολαῖς χρόνον οὐκ ἐχούσαις[7] πολὺν ἐμποιεῖν κρᾶσιν οἰκείαν καὶ τὸ ἄγαν ἑκατέρας ἀφαιρεῖν. διὰ μέσου[8] δὴ[9] τούτων, ὡς εἰκός, ὥραν ἔαρι προσφορωτάτην[10] ἔχουσιν. ἔπειτα πρὸς μὲν ἡμᾶς καθίησι δι' ἀέρος θολεροῦ καὶ συν-
C επερείδοντος[11] θερμότητα ταῖς ἀναθυμιάσεσι τρεφομένην, ἐκεῖ δὲ λεπτὸς ὢν καὶ διαυγὴς ὁ ἀὴρ σκίδνησι καὶ διαχεῖ τὴν αὐγὴν ὑπέκκαυμα καὶ σῶμα μηδὲν

[1] Basiliensis ; συμπαραινοῦσι -E, B.
[2] Basiliensis ; ἡλίου οὐ παύσῃ -E, B.
[3] E : ἀντιθεὶς -B.
[4] Kepler (implied by Amyot's version) ; ἕνδεκα -E, B.
[5] Adler ; θεριναῖς συνόδοις τὰς πανσελήνους -E, B.
[6] H. C. ; εἴσῃ -E, B, Aldine ; εἶτα -Basiliensis.
[7] E : ἐχούσας -B : ἐχούσης -Basiliensis.
[8] Bernardakis ; ἀμέσου -E, B.
[9] H. C. ; δὲ -E, B. [10] Basiliensis ; προσφορωτάτων -E, B.
[11] Dübner : συνεπερείδων τὴν -E, B ; συνεπερείδοντος τὴν -Emperius.

[a] An example of the former hypothesis is Aristotle's theory that each planet is fixed in a sphere revolving within counteracting spheres that cancel the special motions of the superior planet (*cf. Metaphysics*, 1073 b 38—1074 a 14 and *De Caelo*, 289 b 30—290 a 7) ; an example of the latter is Plato's theory of freely moving planets (*cf. Timaeus*, 40 c-d, *Laws*, 822 a-c ; Cornford, *Plato's Cosmology*, pp. 79-93). Theon of Smyrna

with ever constant velocity,[a] for these superpositions of the circles and their rotations and relations to one another and to us combine most harmoniously to produce the apparent variations of her motion in altitude and the deviations in latitude at the same time as her revolutions in longitude.[b] As to the great heat and continual scorching of the sun, you will cease to fear it, if first of all you set the conjunctions over against the twelve summery full-moons [c] and suppose that the continuousness of the change produces in the extremes, which do not last a long time, a suitable tempering and removes the excess from either. Between these then, as is likely, they have a season most nearly approaching spring. In the second place, upon us the sun sends, through air which is turbid and which exerts a concomitant pressure, heat that is nourished by the exhalations, whereas there the air being tenuous and translucent scatters and diffuses the sun's light, which has no tinder or body to sustain it.[d]

(p. 175. 1-4 [Hiller]) observes that the difference between these two kinds of astronomical model is immaterial in "saving the phenomena." On the whole passage *cf.* Eudemus in Theon of Smyrna, p. 200. 13 ff. (Hiller).

[b] Norlind (*Eranos*, xxv [1927], pp. 275-277) argues from the terms used here and in 937 F *supra* that Plutarch has in mind the theory of epicycles which Hipparchus proposed for the moon and which is described by Ptolemy, *Syntaxis*, iv (i, pp. 265 ff. and especially pp. 301. 16–302, 11 [Heiberg]). The evidence of the terminology is not exact enough to make this thesis convincing (*cf. Class. Phil.* xlvi [1951], pp. 146-147).

[c] *Cf.* 938 A *supra* : "twelve summers every year."

[d] For the "pressure" of the air and the ὑπέκκαυμα *cf.* Aristotle, *Meteorology*, 341 b 6-25, and Alexander, *Meteor.* p. 20. 11 ff. Praechter (*Hierokles der Stoiker*, p. 109) refers to Seneca, *Nat. Quaest.* iv b 10 in support of his thesis that the material in this chapter of the *De Facie* is from a Stoic source.

(939) ἔχουσαν. ὕλην δὲ καὶ καρποὺς αὐτοῦ μὲν ὄμβροι τρέφουσιν, ἑτέρωθι δὲ[1] ὥσπερ ἄνω περὶ Θήβας παρ' ὑμῖν καὶ Συήνην οὐκ ὄμβριον ὕδωρ ἀλλὰ γηγενὲς ἡ γῆ[2] πίνουσα καὶ χρωμένη πνεύμασι καὶ δρόσοις οὐκ ἂν ἐθελήσειεν, οἶμαι, τῇ πλεῖστον ὑομένῃ πολυκαρπίᾳ[3] συμφέρεσθαι[4] δι' ἀρετήν τινα καὶ κρᾶσιν. τὰ δ' αὐτὰ φυτὰ τῷ γένει παρ' ἡμῖν μὲν ἐὰν[5] σφόδρα πιεσθῇ χειμῶσιν[6] ἐκφέρει πολὺν καὶ καλὸν καρπὸν
D ἐν δὲ Λιβύῃ[7] καὶ παρ' ὑμῖν ἐν Αἰγύπτῳ δύσριγα κομιδῇ καὶ δειλὰ πρὸς χειμῶνάς ἐστι. τῆς δὲ Γεδρωσίας[8] καὶ Τρωγλοδύτιδος[9] ἣ καθήκει πρὸς τὸν ὠκεανὸν ἀφόρου διὰ ξηρότητα καὶ ἀδένδρου παντάπασιν οὔσης, ἐν τῇ παρακειμένῃ καὶ περικεχυμένῃ θαλάττῃ θαυμαστὰ μεγέθη φυτῶν τρέφεται καὶ κατὰ βυθοῦ τέθηλεν ὧν τὰ μὲν ἐλαίας τὰ δὲ δάφνας

1 Wyttenbach after Xylander's version ; αὐτοὶ . . . ἑτέρως -E, B.
2 Stephanus (1624) : ἤ γε -E, B.
3 Aldine, Basiliensis ; πολυκαρπία -E, B (probably meant for dative, since neither MS. uses iota subscript).
4 Leonicus (implied by version of Xylander) ; συμφαίνεσθαι -E, B : συμφύρεσθαι -Stephanus.
5 Bernardakis ; εἰ -E, B.
6 E[1], B : χιόσιν -E[2].
7 E ; λιβῦι -B.
8 B ; γε δροσίας -E.
9 E : τρωγλοδίτιδος -B.

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a Lamprias is addressing Theon primarily : but Menelaüs also was from Egypt, though we know only Alexandria as his residence.

b Theophrastus (*Hist. Plant.* viii. 6. 6) says that in Egypt, Babylon, and Bactria, where rain is absent or scarce, dews

The fruits of tree and field here in our region are nourished by rains; but elsewhere, as up in your home [a] around Thebes and Syene, the land drinking water that springs from earth instead of rain-water and enjoying breezes and dews [b] would refuse, I think, to adapt itself [c] to the fruitfulness that attends the most abundant rainfall, and that because of a certain excellence and temperament that it has. Plants of the same kind, which in our region if sharply nipped by winter bear good fruit in abundance, in Libya and in your home in Egypt are very sensitive to cold and afraid of winter.[d] And, while Gedrosia and Ethiopia which comes down to the ocean is barren and entirely treeless because of the aridity, in the adjacent and surrounding sea there grow and thrive down in the deep plants of great magnitude, some of which are called olives, some laurels, and some

nourish the crops (*cf.* also *Hist. Plant.* iv. 3. 7). Plutarch's statement here that the water drunk by the land in Egypt is γηγενές may have been inspired by Plato's remark in *Timaeus*, 22 E 2-4; for the theory that the flood of Nile was caused by water springing from the earth *cf.* Oenopides, frag. 11 (i, p. 394. 39 ff. [Diels-Kranz]: *cf.* Seneca, *Nat. Quaest.* iv a 2. 26) and the opinion mentioned without an author by Seneca, *Nat. Quaest.* vi. 8. 3. Praechter (*Hierokles*, p. 110) holds that Plutarch here reflects Posidonius's theory as reconstructed by Oder (*Philologus*, Suppl. vii [1898], pp. 299 ff. and 312 f.).

[c] For this meaning of *συμφέρεσθαί τινι cf. Quomodo Quis Sent. Prof. Virt.* 79 A, *De Cohibenda Ira*, 461 A, *De Sollertia Animalium*, 960 E, *Timoleon*, 15 (242 E), Wyttenbach's *Animadversiones in Plutarchi Opera Moralia* (Leipzig, 1820), i, p. 461; the phrase cannot mean "to be compared with," as it has been regularly translated here.

[d] That the same species of plant varies with the nature of the soil, the atmosphere, and the cultivation is frequently stated by Theophrastus (*cf. e.g. Hist. Plant.* vi. 6. 3-5-8); *cf.* with ἐὰν σφόδρα πιεσθῇ χειμῶσιν in this passage Theophrastus, *De Causis Plant.* ii. 1. 2-4.

(939) τὰ δ' Ἴσιδος τρίχας καλοῦσιν. οἱ δ' ἀνακαμψέρωτες οὗτοι προσαγορευόμενοι τῆς γῆς ἐξαιρεθέντες οὐ μόνον ζῶσι κρεμάμενοι χρόνον ὅσον βούλεταί τις ἀλλὰ βλαστάνουσιν ⟨. . .⟩.[1] σπείρεται δὲ τὰ μὲν πρὸς χειμῶνος τὰ δὲ θέρους ἀκμάζοντος ὥσπερ σήσαμον καὶ μελίνη. τὸ[2] δὲ θύμον ἢ τὸ κενταύριον,
E ἂν εἰς ἀγαθὴν καὶ πίονα σπαρῇ χώραν καὶ βρέχηται καὶ ἄρδηται, τῆς κατὰ φύσιν ἐξίσταται ποιότητος καὶ ἀποβάλλει τὴν δύναμιν αὐχμῷ δὲ χαίρει καὶ πρὸς τὸ οἰκεῖον ἐπιδίδωσιν. ἔνια δ'[3] ὥς φασιν οὐδὲ τὰς δρόσους ἀνέχεται, καθάπερ τὰ πλεῖστα τῶν Ἀραβικῶν, ἀλλ' ἐξαμαυροῦται διαινόμενα[4] καὶ φθείρεται, τί δὴ[5] θαυμαστόν ἐστιν εἰ γίγνονται περὶ τὴν σελήνην ῥίζαι καὶ σπέρματα καὶ ὗλαι μηδὲν ὑετῶν δεόμεναι[6] μηδὲ[7] χιόνων ἀλλὰ πρὸς θερινὸν[8] ἀέρα καὶ λεπτὸν εὐφυῶς ἔχουσαι; πῶς δ' οὐκ εἰκὸς ἀνιέναι τε πνεύματα θαλπόμενα τῇ σελήνῃ
F καὶ τῷ σάλῳ τῆς περιφορᾶς αὔρας τε παρομαρτεῖν ἀτρέμα καὶ δρόσους καὶ ὑγρότητας ἐλαφρὰς περιχεούσας καὶ διασπειρομένας ἐπαρκεῖν τοῖς βλαστάνουσιν, αὐτὴν[9] δὲ τῇ κράσει μὴ πυρώδη μηδ' αὐχμηρὰν ἀλλὰ μαλακὴν καὶ ὑδροποιὸν εἶναι; ξηρότητος μὲν γὰρ οὐδὲν ἀφικνεῖται πάθος ἀπ' αὐτῆς

[1] Vac. 21-E, 20-B.
[2] E ; τὸν -B.
[3] Paton ; οἱ δὲ -E, B, Aldine ; τὰ δὲ -Basiliensis ; εἰ δὲ -Stephanus (1624).
[4] Wyttenbach (after the version of Xylander) ; λειαινόμενα -E, B.
[5] -Anon., Aldine, R.J. 94 : τί δὲ -E, B.
[6] Bernardakis ; δεόμενα -E, B.
[7] Bernardakis ; μήτε -E, B.
[8] Leonicus, Stephanus (1624) ; πρόσθερον -E, B.
[9] Wyttenbach ; αὐτῇ (*i.e.* αὐτῇ) -E, B.

tresses of Isis [a]; and the plants here called 'love-restorers' when lifted out of the earth and hung up not only live as long as you wish but sprout [b] ⟨. . .⟩. Some plants are sown towards winter, and some at the height of summer as sesame and millet.[c] Thyme or centaury, if sown in good, rich soil and wetted and watered, departs from its natural quality and loses its strength, whereas drought delights it and causes it to reach its proper stature [d]; and some plants, as they say, cannot stand even dew, as is true of the majority of Arabian plants, but are blighted and destroyed by being moistened.[e] What wonder then if on the moon there grow roots and seeds and trees that have no need of rain nor yet of snow but are naturally adapted to a summery and rarefied air? And why is it unlikely that winds arise warmed by the moon and that breezes steadily accompany the rolling swell of her revolution and by scattering off and diffusing dews and light moisture suffice for the vegetation and that she herself is not fiery or dry in temperament but soft and humidifying? After all, no influence of dryness comes to us from her but much of

[a] On these plants that grew in the sea *cf.* Theophrastus, *Hist. Plant.* iv. 7. 1 ff.; Eratosthenes in Strabo, xvi. 3. 6 (c. 766); Pliny, *Nat. Hist.* xiii. 25. 50-52 (140-142). In *Quaest. Nat.* 911 F Plutarch refers to the plants that are said to grow in the "Red Sea," but there he states that they are nurtured by the rivers which bring down mud and that these plants consequently grow only near to the shore.

[b] *Cf.* Pliny, *Nat. Hist.* xxiv. 17. 102 (167).

[c] *Cf.* Theophrastus, *Hist. Plant.* viii. 1. 1 and 4; 2. 6; and 3. 2.

[d] *Cf.* Theophrastus, *De Causis Plant.* iii. 1. 3-6.

[e] For the notion that dew injures some plants *cf.* possibly Theophrastus, *De Causis Plant.* vi. 18. 10; but he holds that desert vegetation is nourished by dew in default of rain (*Hist. Plant.* iv. 3. 7 and viii. 6. 6).

(939) πρὸς ἡμᾶς ὑγρότητος δὲ πολλὰ καὶ θηλύτητος, αὐξήσεις φυτῶν, σήψεις κρεῶν, τροπαὶ καὶ ἀνέσεις οἴνων, μαλακότητες ξύλων, εὐτοκίαι γυναικῶν. δέ-
940 δοικα δ' ἡσυχάζοντα Φαρνάκην αὖθις ἐρεθίζειν καὶ κινεῖν, ὠκεανοῦ τε[1] πλημμύρας, ὥς λέγουσιν αὐτοί, καὶ πορθμῶν ἐπιδόσεις διαχεομένων καὶ αὐξανομένων ὑπὸ τῆς σελήνης τῷ ἀνυγραίνεσθαι παρατιθέμενος. διὸ πρὸς σὲ τρέψομαι μᾶλλον, ὦ φίλε Θέων· λέγεις γὰρ ἡμῖν, ἐξηγούμενος ταυτὶ[2] τὰ Ἀλκμᾶνος

⟨οἷα Διὸς⟩[3] θυγάτηρ Ἔρσα[4] τρέφει καὶ Σελάνας ⟨δίας⟩,[5]

ὅτι νῦν τὸν ἀέρα καλεῖ Δία καί[6] φησιν αὐτὸν ὑπὸ τῆς σελήνης καθυγραινόμενον εἰς δρόσους τρέπεσθαι. κινδυνεύει γάρ, ὦ ἑταῖρε, πρὸς τὸν ἥλιον ἀντιπαθῆ φύσιν ἔχειν εἴγε μὴ μόνον ὅσα πυκνοῦν
B καὶ ξηραίνειν ἐκεῖνος αὐτὴ μαλάσσειν καὶ διαχεῖν πέφυκεν ἀλλὰ καὶ τὴν ἀπ' ἐκείνου θερμότητα καθυγραίνειν καὶ καταψύχειν προσπίπτουσαν αὐτῇ καὶ

[1] Basiliensis ; ὥστε καὶ ἀνοιγαὶ -E, B.
[2] Bernardakis ; ταύτῃ -E, B.
[3] Xylander (*cf. Quaest. Nat.* 918 A, *Quaest. Conviv.* 659 B) ; vac. 6-E, 12-B.
[4] Xylander ; ἔργα -E, B.
[5] Wyttenbach (*cf.* MSS. of 918 A) ; καὶ Σελάνας without lacuna -E, B.
[6] Wyttenbach : καλεῖ καὶ Δία -E, B.

[a] *Cf. De Vita et Poesi Homeri*, B, 202 (vii, p. 450. 14-20 [Bernardakis]) ; Aristotle, *Hist. Animal.* 582 a 34-b 3.
[b] On the liquefying action of the moon and the passage in general *cf. Quaest. Conviv.* iii. 10 (657 F ff.) ; *De Iside*, 367 D ; Cicero, *De Nat. Deorum*, ii. 19. 50 (with Mayor's note *ad loc.*) ; Pliny, *Nat. Hist.* ii. 101 (223). On the growth of

moistness and femininity [a]: the growth of plants, the decay of meats, the souring and flattening of wine, the softening of timbers, the easy delivery of women.[b] Now that Pharnaces is quiet I am afraid of provoking and arousing him again if I cite, in the words of his own school, the flood-tides of Ocean and the swelling of the straits when they are increased and poured abroad by the liquefying action of the moon.[c] Therefore I shall rather turn to you, my dear Theon, for when you expound these words of Alcman's,

> ⟨Such as⟩ are nourished by Dew, daughter ⟨of Zeus⟩ and of ⟨divine⟩ Selene,[d]

you tell us that at this point he calls the air 'Zeus' and says that it is liquefied by the moon and turns to dew-drops.[e] It is in fact probable, my friend, that the moon's nature is contrary to that of the sun, if of herself she not only naturally softens and dissolves all that he condenses and dries but liquefies and cools even the heat that he casts upon her and imbues her

plants *cf.* also *De Iside*, 353 F and Athenaeus, iii. 74 C; on softening of timbers Theophrastus, *Hist. Plant.* v. 1. 3; on easy delivery *S.V.F.* ii, frag. 748. For further literature *cf.* Boll, *Sternglaube und Sterndeutung*[3] (1926), pp. 122-125.

[c] = *S.V.F.* ii, frag. 679. *Cf.* also Cicero, *De Divinatione*, ii. 34 (with Pease's note *ad loc.*) and *De Nat. Deorum*, ii. 7. 19; Seneca, *De Provid.* i. 4; Cleomedes, ii. 1. 86 (p. 156. 15-16 [Ziegler]) and ii. 3. 98 (p. 178. 4-5); Strabo, iii. 5. 8 (cc. 173 f.) and i. 3. 11 (cc. 54-55). In *De Placitis*, 897 B-C (=Aëtius, iii. 17. 3 and 9) theories that the moon influences the tides are attributed to Pytheas and to Seleucus.

[d] Alcman, frag. 43 (Diehl)=48 (Bergk[4]). In both *Quaest. Conviv.* 659 B and *Quaest. Nat.* 918 A Plutarch quotes the line as an explanation of the origin of dew. *Cf.* Macrobius, *Sat.* vii. 16. 31-32.

[e] *Cf.* Vergil, *Georgics*, iii. 337; Roscher, *Selene und Verwandtes*, p. 50, n. 200.

(940) συμμιγνυμένην. οἵ τε δὴ[1] τὴν σελήνην ἔμπυρον σῶμα καὶ διακαὲς εἶναι νομίζοντες ἁμαρτάνουσιν, οἵ τε τοῖς ἐκεῖ ζῴοις ὅσα τοῖς ἐνταῦθα πρὸς γένεσιν καὶ τροφὴν καὶ δίαιταν ἀξιοῦντες ὑπάρχειν ἐοίκασιν ἀθεάτοις[2] τῶν περὶ τὴν φύσιν[3] ἀνωμαλιῶν, ἐν αἷς μείζονας ἔστι καὶ πλείονας[4] πρὸς ἄλληλα τῶν ζῴων ἢ πρὸς τὰ μὴ ζῷα διαφορὰς καὶ ἀνομοιότητας εὑρεῖν. καὶ ἄστομοι[5] μὲν ἄνθρωποι καὶ ὀσμαῖς C τρεφόμενοι μὴ ἔστωσαν, οἵ[6] Με⟨γασθένει γ' εἶ⟩ναι[7] δοκοῦσι. τὴν δ' ἄλιμον[8] ἧς[9] ἡμῖν αὐτὸς ἐξηγεῖτο δύναμιν ᾐνίξατο μὲν Ἡσίοδος εἰπὼν

οὐδ' ὅσον ἐν μαλάχῃ τε καὶ ἀσφοδέλῳ μέγ' ὄνειαρ

ἔργῳ δ' ἐμφανῆ παρέσχεν Ἐπιμενίδης διδάξας ὅτι μικρῷ παντάπασιν ἡ φύσις ὑπεκκαύματι ζωπυρεῖ καὶ συνέχει τὸ ζῷον, ἂν ὅσον ἐλαίας μέγεθος λάβῃ, μηδεμιᾶς ἔτι τροφῆς δεόμενον. τοὺς δ' ἐπὶ τῆς σελήνης, εἴπερ εἰσίν, εὐσταλεῖς εἶναι τοῖς σώμασι καὶ διαρκεῖς ὑπὸ τῶν τυχόντων τρέφεσθαι πιθανόν ἐστι. καὶ γὰρ αὐτὴν τὴν σελήνην ὥσπερ τὸν ἥλιον,

[1] Stephanus (1624) ; δὲ -E, B.
[2] Xylander ; ἐοίκασι καὶ θεαταῖς -E, B.
[3] E ; περὶ φύσιν -B. [4] B ; πλέονας -E.
[5] -Anon., Aldine, R.J. 94 (*cf.* 938 c *supra*) ; σύστομοι -E, B, Aldine, Basiliensis.
[6] Wyttenbach ; εἰ -E, B.
[7] H. C. after Adler's ⟨καὶ Μεγασθένει⟩ : μὴ vac. 8-E, 9-B μὴ.
[8] Adler (1933) ; τήν τε ἄμμονος -E, B.
[9] H. C. (for the final ος in ἄμμονος).

[a] *Cf.* Aristotle, *Hist. Animal.* 588 b 4 ff. and *De Part. Animal.* 681 a 12-15.
[b] See 938 c *supra* and note *d* there. On the text and im-

with. They err then who believe the moon to be a fiery and glowing body ; and those who demand that living beings there be equipped just as those here are for generation, nourishment, and livelihood seem blind to the diversities of nature, among which one can discover more and greater differences and dissimilarities between living beings than between them and inanimate objects.[a] Let there not be mouthless men nourished by odours who ⟨Megasthenes⟩ thinks ⟨do exist⟩ [b] ; yet the Hungerbane,[c] the virtue of which he was himself trying to explain to us, Hesiod hinted at when he said

> Nor what great profit mallow has and squill [d]

and Epimenides made manifest in fact when he showed that with a very little fuel nature kindles and sustains the living creature, which needs no further nourishment if it gets as much as the size of an olive.[e] It is plausible that the men on the moon, if they do exist, are slight of body and capable of being nourished by whatever comes their way.[f] After all, they say that the moon herself, like the sun which is an

plication of this sentence *cf. Class. Phil.* xlvi (1951), pp. 147-148.

[c] For ἡ ἄλιμος *cf. Sept. Sap.* 157 D-F ; [Plutarch], *Comment. in Hesiod.* § 3 (vii, p. 51. 14 ff. [Bernardakis]) ; Pliny, *Nat. Hist.* xxii. 22 (73) ; Porphyry, *Vita Pythag.* § 34 and *De Abstinentia*, iv. 20 (p. 266. 5 ff. [Nauck]) ; Plato, *Laws*, 677 E (where the word ἄλιμος itself does not occur, however).

[d] *Works and Days*, 41.

[e] *Cf.* Epimenides, frag. A 5 (i, pp. 30-31 [Diels-Kranz]), where reference to this passage should be added.

[f] *Cf.* Aristotle, *De Gen. Animal.* 761 b 21-23 for the suggestion that animate beings of a kind unknown to us may exist on the moon and [Philoponus], *De Gen. Animal.* p. 160. 16-20 for a description of these creatures that do not eat or drink.

(940) D ζῷον ὄντα πύρινον καὶ τῆς γῆς ὄντα πολλαπλάσιον, ἀπὸ τῶν ὑγρῶν φασι τῶν ἐπὶ τῆς γῆς τρέφεσθαι καὶ τοὺς ἄλλους ἀστέρας ἀπείρους ὄντας· οὕτως ἐλαφρὰ καὶ λιτὰ τῶν ἀναγκαίων φέρειν ζῷα τὸν ἄνω τόπον ὑπολαμβάνουσιν. ἀλλ' οὔτε ταῦτα συνορῶμεν οὔθ' ὅτι καὶ χώρα καὶ φύσις καὶ κρᾶσις ἄλλη πρόσφορός ἐστιν αὐτοῖς. ὥσπερ οὖν, εἰ τῇ θαλάττῃ μὴ δυναμένων ἡμῶν προσελθεῖν μηδ' ἅψασθαι μόνον δὲ τὴν θέαν αὐτῆς πόρρωθεν ἀφορώντων καὶ πυνθανομένων ὅτι πικρὸν καὶ ἄποτον καὶ ἁλμυρὸν ὕδωρ ἐστὶν ἔλεγέ τις ὡς ζῷα πολλὰ
E καὶ μεγάλα καὶ παντοδαπὰ ταῖς μορφαῖς τρέφει κατὰ βάθους καὶ θηρίων ἐστὶ πλήρης ὕδατι χρωμένων ὅσαπερ ἡμεῖς ἀέρι, μύθοις ἂν ὅμοια καὶ τέρασιν ἐδόκει περαίνειν· οὕτως ἐοίκαμεν ἔχειν καὶ ταὐτὸ πάσχειν[1] πρὸς τὴν σελήνην ἀπιστοῦντες ἐκεῖ τινας ἀνθρώπους κατοικεῖν. ἐκείνους δ' ἂν οἴομαι πολὺ μᾶλλον ἀποθαυμάσαι τὴν γῆν, ἀφορῶντας οἷον ὑποστάθμην καὶ ἰλὺν τοῦ παντὸς ἐν ὑγροῖς καὶ ὁμίχλαις καὶ νέφεσι διαφαινομένην ἀλαμπὲς καὶ ταπεινὸν καὶ ἀκίνητον χωρίον, εἰ ζῷα φύει καὶ τρέφει μετέχοντα κινήσεως ἀναπνοῆς θερμότητος. κἂν
F εἴ ποθεν αὐτοῖς ἐγγένοιτο τῶν Ὁμηρικῶν τούτων ἀκοῦσαι

σμερδαλέ', εὐρώεντα, τά τε στυγέουσι θεοί περ

[1] Wyttenbach (after the versions of Xylander and Amyot); τούτοις ἀσκεῖν -E: τούτους ἀσκεῖν -B.

[a] = *S.V.F.* ii, frag. 677. *Cf. De Stoicorum Repugnantiis*, 1053 A (= *S.V.F.* ii, frag. 579); Aëtius, ii. 17. 4; Strabo, i. 1. 9 (c. 6); Cleomedes, i. 6. 33 (p. 60. 21-24 [Ziegler]).

animate being of fire many times as large as the earth, is nourished by the moisture on the earth, as are the rest of the stars too, though they are countless; so light and frugal of requirements do they conceive the creatures to be that inhabit the upper region.[a] We have no comprehension of these beings, however, nor of the fact that a different place and nature and temperature are suitable to them. Just as, assuming that we were unable to approach the sea or touch it but only had a view of it from afar and the information that it is bitter, unpotable, and salty water, if someone said that it supports in its depths many large animals of multifarious shapes and is full of beasts that use water for all the ends that we use air, his statements would seem to us like a tissue of myths and marvels, such appears to be our relation to the moon and our attitude towards her is apparently the same when we disbelieve that any men dwell there. Those men, I think, would be much more amazed at the earth, when they look out at the sediment and dregs [b] of the universe, as it were, obscurely visible in moisture, mists, and clouds as a lightless, low, and motionless spot, to think that it engenders and nourishes animate beings which partake of motion, breath, and warmth. If they should chance to hear somewhere these Homeric words,

> Dreadful and dank, which even gods abhor [c]

Plutarch, of course, uses Stoic doctrine here against the Stoics.

[b] Zeno called earth ἰλύς and ὑποστάθμη (*S.V.F.* i, frags. 104 and 105); but, since the end of this chapter appears to have been inspired by Plato's *Phaedo*, 109 B-D, the phrase here used was probably suggested to Plutarch by Plato's use of ὑποστάθμη there (109 C 2).

[c] *Iliad*, xx. 65.

(940) *καὶ*

> *τόσσον ἔνερθ' Ἀΐδεω*[1] *ὅσον οὐρανός ἐστ' ἀπὸ γαίης,*

ταῦτα φήσουσιν ἀτεχνῶς περὶ τοῦ χωρίου τούτου λέγεσθαι καὶ τὸν Ἅιδην ἐνταῦθα[2] *καὶ τὸν Τάρταρον ἀπῳκίσθαι*[3] *γῆν δὲ μίαν εἶναι τὴν σελήνην, ἴσον ἐκείνων τῶν ἄνω καὶ τῶν κάτω τούτων ἀπέχουσαν."*

26. *Ἔτι δ' ἐμοῦ*[4] *σχεδὸν λέγοντος ὁ Σύλλας ὑπολαβὼν " ἐπίσχες " εἶπεν " ὦ Λαμπρία, καὶ παραβαλοῦ τὸ θύριον τοῦ λόγου, μὴ λάθῃς τὸν μῦθον ὥσπερ εἰς γῆν ἐξοκείλας καὶ συγχέῃς τὸ δρᾶμα τοὐ-*
941 *μὸν ἑτέραν ἔχον σκηνὴν καὶ διάθεσιν. ἐγὼ μὲν οὖν ὑποκριτής εἰμι, πρότερον δ' αὐτοῦ φράσω τὸν ποιητὴν ἡμῖν*[5] *εἰ μή τι κωλύει*[6] *καθ' Ὅμηρον ἀρξάμενον*[7]

> *Ὠγυγίη τις νῆσος ἀπόπροθεν*[8] *εἰν ἁλὶ κεῖται*

δρόμον ἡμερῶν πέντε Βρεττανίας ἀπέχουσα πλέοντι πρὸς ἑσπέραν. ἕτεραι δὲ τρεῖς ἴσον ἐκείνης ἀφεστῶσαι καὶ ἀλλήλων πρόκεινται μάλιστα κατὰ δυσμὰς ἡλίου θερινάς, ὧν ἐν μιᾷ τὸν Κρόνον οἱ βάρβαροι καθεῖρχθαι μυθολογοῦσιν ὑπὸ τοῦ Διός, τὸν δ' ὠγύγιον ⟨Βριάρεων⟩[9] *ἔχοντα φρουρὰν*[10] *τῶν τε νήσων ἐκείνων καὶ τῆς θαλάττης, ἣν Κρόνιον*

[1] Bernardakis ; *Ἀΐδαο* -E, B.
[2] Written twice in B.
[3] E : *ἀποκεῖσθαι* -B.
[4] Bernardakis ; *δέ μου* -E, B.
[5] E, B ; *ὑμῖν* -Stephanus (1624).
[6] E, B¹ ; *κωλύοι* -B².
[7] E, B : *ἀρξάμενος* -Hutten.
[8] Stephanus (1624) ; *ἀπόπροσθεν* -E, B.
[9] " Le Géant Ogygius ou Briareus " -Amyot ; *τὸν δ' ὡς υἱὸν* -E, B : *τὸν δὲ Βριάρεων* -Kaltwasser : *τὸν δ' Ὤγυγον* -Apelt (1905).

and

> Deep under Hell as far as Earth from Heaven,[a]

these they would say are simply a description of this place and Hell and Tartarus have been relegated hither while the moon alone is earth, since it is equally distant from those upper regions and these lower ones."

26. Almost before I had finished, Sulla broke in. "Hold on, Lamprias," he said, "and put to the wicket of your discourse [b] lest you unwittingly run the myth aground, as it were, and confound my drama, which has a different setting and a different disposition. Well, I am but the actor of the piece, but first I shall say that its author began for our sake—if there be no objection—with a quotation from Homer [c]:

> An isle, Ogygia, lies far out at sea,[d]

a run of five days off from Britain as you sail westward; and three other islands equally distant from it and from one another lie out from it in the general direction of the summer sunset. In one of these, according to the tale told by the natives, Cronus is confined by Zeus, and the antique ⟨Briareus⟩, holding watch and ward over those islands and the sea that

[a] *Iliad*, viii. 16.
[b] *Cf. De Sollertia Animalium*, 965 B.
[c] On the text of this sentence *cf. Class. Phil.* xlvi (1951), pp. 148-149.
[d] *Odyssey*, vii. 244. On the geographical introduction to the myth see the Introduction, § 5, and especially Hamilton, *Class. Quart.* xxviii (1934), pp. 15-26, who points out the parallel between Plutarch's geographical scheme and Plato's location of Atlantis in *Timaeus*, 24 E—25 A.

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[10] Kaltwasser (implied by Amyot's version); φρουρὸν -E, B.

(941) B πέλαγος ὀνομάζουσι, παρακατῳκίσθαι.[1] τὴν δὲ μεγάλην ἤπειρον, ὑφ' ἧς ἡ μεγάλη περιέχεται κύκλῳ θάλαττα, τῶν μὲν ἄλλων ἔλαττον ἀπέχειν[2] τῆς δ' Ὠγυγίας περὶ πεντακισχιλίους σταδίους κωπήρεσι πλοίοις κομιζομένῳ· βραδύπορον γὰρ εἶναι καὶ πηλῶδες ὑπὸ πλήθους ῥευμάτων τὸ πέλαγος. τὰ δὲ ῥεύματα τὴν μεγάλην ἐξιέναι γῆν καὶ γίγνεσθαι προσχώσεις[3] ἀπ' αὐτῶν καὶ βαρεῖαν εἶναι καὶ γεώδη τὴν θάλατταν, ᾗ[4] καὶ πεπηγέναι δόξαν ἔσχε. τῆς δ' ἠπείρου τὰ πρὸς τῇ θαλάττῃ κατοικεῖν Ἕλληνας περὶ κόλπον οὐκ ἐλάττονα τῆς Μαιώτιδος, οὗ τὸ στόμα τῷ στόματι τοῦ Κασπίου
C πελάγους μάλιστα κατ' εὐθεῖαν κεῖσθαι,[5] καλεῖν δὲ καὶ νομίζειν ἐκείνους ἠπειρώτας μὲν αὐτοὺς[6] ⟨νη-

[1] Apelt (1905) and implied by Amyot's version: παρακάτω κεῖσθαι -E, B.
[2] Basiliensis; ἀπέχει -E, B.
[3] Dübner; προχώσεις -E, B.
[4] E, B; ᾗ -Wyttenbach.
[5] E; κινεῖσθαι -B.
[6] Dübner (implied by Amyot's version); αὑτοὺς -E, B.

[a] *Cf. De Defectu Oraculorum*, 420 A and on the text *Class. Phil.* xlvi (1951), p. 149. For Briareus as a guard set by Zeus over Cronus and the Titans *cf.* Hesiod, *Theogony*, 729-735 and Apollodorus, i. 7 (=i. 2. 1). The pillars of Heracles are said to have had the older name Βριάρεω στῆλαι (*cf.* Aelian, *Var. Hist.* v. 3=Aristotle, frag. 678) and before that Κρόνου στῆλαι (*cf.* Charax, frag. 16=*Frag. Hist. Graec.* iii, p. 640); *cf.* also Clearchus, frag. 56 (*Frag. Hist. Graec.* ii, p. 320) and Parthenius, frag. 21 (Diehl)=frag. 31 (Martin).

[b] *Cf. Timaeus* 24 E 5–25 A 5.

[c] Plutarch's language really implies that the way is so long—not just that it takes a long time—because the sea is hard to traverse!

[d] *Cf.* Strabo, i. 4. 2 (c. 63): ἣν (*i.e.* Θούλην) φησι Πυθέας . . . ἐγγὺς εἶναι τῆς πεπηγυίας θαλάττης, and Pliny, *Nat. Hist.* iv. 16 (104): " a Tyle unius diei navigatione mare concretum a nonnullis Cronium appellatur " (*n.b.* that for Apollonius

they call the Cronian main, has been settled close beside him.[a] The great mainland, by which the great ocean is encircled,[b] while not so far from the other islands, is about five thousand stades from Ogygia, the voyage being made by oar, for the main is slow to traverse and muddy as a result of the multitude of streams.[c] The streams are discharged by the great land-mass and produce alluvial deposits, thus giving density and earthiness to the sea, which has been thought actually to be congealed.[d] On the coast of the mainland Greeks dwell about a gulf which is not smaller than the Maeotis[e] and the mouth of which lies roughly on the same parallel as the mouth of the Caspian sea.[f] These people consider and call themselves continentals ⟨and the⟩ inhabitants of this land

Rhodius [iv. 327, 509, 546] the Adriatic is the Cronian sea); *cf.* Tacitus, *Agricola*, § 10 and *Germania*, § 45. Plutarch *denies* that the sea is really congealed as it is reputed to be and explains its nature in imitation of Plato (*Timaeus*, 25 D 3-6, *Critias*, 108 E 6—109 A 2): but, since he cannot adduce as the cause of the muddy shallows the "settling of the island, Atlantis, under the sea," he falls back upon alluvial deposits from the rivers on the great continent, a notion familiar from many sources (*cf. De Exilio*, 602 D with Thucydides, ii. 102. 6; Aristotle, *Meteorology*, 351 b 28-32; Herodotus, ii. 10; Strabo, i. 2. 29-30 [cc. 36-37]). For the "congealed sea" *cf.* further K. Müllenhoff, *Deutsche Altertumskunde*, i (1890), pp. 410-425; E. Janssens, *Hist. ancienne de la mer du Nord*[2] (1946), pp. 20-22; J. O. Thomson, *Hist. of Ancient Geography*, pp. 148-149, 241, and 54-55 (on Avienus, *Ora Maritima*, 117-129).

[e] The Sea of Azov, the size of which Herodotus had greatly exaggerated (iv. 86): Strabo reduced its perimeter to 9000 stades (ii. 5. 23 [c. 125]).

[f] The Caspian was thought to be a gulf of the outer ocean from the time of Alexander until Ptolemy corrected the error (*Alexander*, chap. 44; Strabo, xi. 6. 1 [c. 507]), though Herodotus (i. 202-203) and Aristotle (*Meteorology*, 354 a 3-4) had known that it was connected with no other sea.

(941) σιώτας δὲ τοὺς⟩[1] ταύτην τὴν γῆν κατοικοῦντας, ὡς καὶ κύκλῳ περίρρυτον οὖσαν ὑπὸ τῆς θαλάσσης. οἴεσθαι δὲ τοῖς Κρόνου λαοῖς ἀναμιχθέντας ὕστερον τοὺς μεθ' Ἡρακλέους παραγενομένους καὶ ὑπολειφθέντας ἤδη σβεννύμενον τὸ Ἑλληνικὸν ἐκεῖ καὶ κρατούμενον γλώττῃ τε βαρβαρικῇ καὶ νόμοις καὶ διαίταις οἷον ἀναζωπυρῆσαι πάλιν ἰσχυρὸν καὶ πολὺ γενόμενον. διὸ τιμὰς ἔχειν πρώτας τὸν Ἡρακλέα δευτέρας δὲ τὸν Κρόνον. ὅταν οὖν[2] ὁ τοῦ Κρόνου ἀστήρ, ὃν Φαίνοντα μὲν ἡμεῖς ἐκείνους δὲ Νυκτοῦρον ἔφη καλεῖν, εἰς Ταῦρον παραγένηται δι' ἐτῶν τριάκοντα, παρασκευασαμένους ἐν χρόνῳ D πολλῷ τὰ περὶ τὴν θυσίαν καὶ τὸν ἀ⟨πόστολον θεωροὺς ἱκανοὺς⟩[3] ἐκπέμπειν κλήρῳ λαχόντας ἐν πλοίοις τοσούτοις θεραπείαν τε πολλὴν καὶ παρασκευὴν[4] ἀναγκαίαν μέλλουσι πλεῖν πέλαγος τοσοῦτον εἰρεσίᾳ καὶ χρόνον ἐπὶ ξένης βιοτεύειν πολὺν ἐμβαλλομένους.[5] ἀναχθέντας οὖν χρῆσθαι[6] τύχαις, ὡς εἰκός, ἄλλους ἄλλαις. τοὺς δὲ διασωθέντας ἐκ τῆς θαλάττης πρῶτον μὲν ἐπὶ τὰς προκειμένας νήσους οἰκουμένας δ' ὑφ' Ἑλλήνων κατίσχειν καὶ

[1] νησιώτας δὲ -Basiliensis ; νησιώτας δὲ τοὺς -Wyttenbach ; lacking in E and B without sign of lacuna.
[2] E ; ὅταν δὲ -B.
[3] H. C. ; τὸν ἀ vac. 23-E, 16-B.
[4] B ; vac. 5 σκευὴν -E.
[5] Wyttenbach ; ἐμβάλλομεν οὓς -E, B.
[6] Xylander ; οὐ χρὴ -E, B.

[a] Φαίνων as the name of the planet Saturn occurs in *De An. Proc. in Timaeo*, 1029 B (acc. : Φαίνωνα) ; Aëtius, ii. 15. 4 (where mss. vary between Φαίνωνα and Φαίνοντα, *cf.* Diels, *Dox. Graeci*, p. 344 *ad loc.*) ; [Aristotle], *De Mundo*, 392 a 23 (Φαίνοντος) ; *cf.* Cicero, *De Natura Deorum*, ii. 20. 52. There is a similar variation in the mss. as between Στίλβοντα and Στίλβωνα (*cf.* Diels, *Dox. Graeci*, p. 345 on Aëtius, ii. 15. 4),

⟨islanders⟩ because the sea flows around it on all sides ; and they believe that with the peoples of Cronus there mingled at a later time those who arrived in the train of Heracles and were left behind by him and that these latter so to speak rekindled again to a strong, high flame the Hellenic spark there which was already being quenched and overcome by the tongue, the laws, and the manners of the barbarians. Therefore Heracles has the highest honours and Cronus the second. Now when at intervals of thirty years the star of Cronus, which we call 'Splendent' [a] but they, our author said, call 'Nightwatchman,' enters the sign of the Bull,[b] they, having spent a long time in preparation for the sacrifice and the ⟨expedition⟩, choose by lot and send forth ⟨a sufficient number of envoys⟩ in a correspondingly sufficient number of ships, putting aboard a large retinue and the provisions necessary for men who are going to cross so much sea by oar and live such a long time in a foreign land. Now when they have put to sea the several voyagers meet with various fortunes as one might expect ; but those who survive the voyage first put in at the outlying islands, which are inhabited by Greeks,[c] and see the sun pass out of

though at 925 A *supra* the MSS. of *De Facie* agree on Στίλβοντα.

[b] Taurus is the sign of the moon's exaltation (*cf.* Ptolemy, *Tetrabiblos*, i. 20 [p. 44. 2, Boll-Boer] ; Porphyry, *De Antro Nymph.* 18), and it is for this reason that the expedition begins when Saturn enters this sign. For the "thirty years" *cf.* Aëtius, ii. 32. 1 (*Dox. Graeci*, p. 363) ; Cleomedes, i. 3. 16-17 (p. 30. 18-21 [Ziegler]) ; Cicero, *De Natura Deorum*, ii. 20. 52.

[c] These islands lie out westward or north-westward from Ogygia, *cf.* 941 A *supra*. It has not previously been said that they are inhabited by Greeks : in fact, 941 B seems to imply that Greeks live only on the mainland.

(941) τὸν ἥλιον ὁρᾶν κρυπτόμενον ὥρας μιᾶς ἔλαττον ἐφ' ἡμέρας τριάκοντα (καὶ νύκτα τοῦτ' εἶναι, σκότος ἔχουσαν ἐλαφρὸν καὶ λυκαυγὲς ἀπὸ δυσμῶν περιλαμπόμενον). ἐκεῖ δὲ διατρίψαντας ἡμέρας ἐνενήκοντα,[1] μετὰ τιμῆς καὶ φιλοφροσύνης ἱεροὺς
E νομιζομένους καὶ προσαγορευομένους, ὑπὸ πνευμάτων οἷ δεῖ[2] περαιοῦσθαι. μηδ' ἄλλους τινὰς ἐνοικεῖν ἢ σφᾶς τ' αὐτοὺς καὶ τοὺς πρὸ αὐτῶν ἀποπεμφθέντας. ἐξεῖναι μὲν γὰρ ἀποπλεῖν οἴκαδε τοὺς τῷ θεῷ τὰ τρὶς δέκ' ἔτη[3] συλλατρεύσαντας, αἱρεῖσθαι δὲ τοὺς πλείστους ἐπιεικῶς αὐτόθι κατοικεῖν τοὺς μὲν ὑπὸ συνηθείας τοὺς δ' ὅτι πόνου δίχα καὶ πραγμάτων ἄφθονα πάρεστι πάντα πρὸς θυσίαις καὶ χορηγίαις ἢ[4] περὶ λόγους τινὰς ἀεὶ καὶ
F φιλοσοφίαν διατρίβουσι. θαυμαστὴν γὰρ εἶναι τῆς τε νήσου τὴν φύσιν καὶ τὴν πραότητα τοῦ περιέχοντος ἀέρος. ἐνίοις δὲ καὶ τὸ θεῖον ἐμποδὼν γίγνεσθαι διανοηθεῖσιν ἀποπλεῖν ὥσπερ συνήθεσι καὶ φίλοις ἐπιδεικνύμενον οὐκ ὄναρ μόνον οὐδὲ διὰ συμβόλων, ἀλλὰ καὶ φανερῶς ἐντυγχάνειν πολλοὺς ὄψεσι δαιμόνων καὶ φωναῖς. αὐτὸν μὲν γὰρ τὸν Κρόνον ἐν ἄντρῳ βαθεῖ περιέχεσθαι πέτρας χρυσοειδοῦς καθεύδοντα. τὸν γὰρ ὕπνον αὐτῷ μεμηχανῆσθαι δεσμὸν ὑπὸ τοῦ Διός, ὄρνιθας δὲ τῆς πέτρας κατὰ κορυφὴν εἰσπετομένους[5] ἀμβροσίαν

[1] E ; ἐνενήκοντα καὶ μετὰ -B.
[2] Bernardakis ; ἤδη -E, B.
[3] Bernardakis ; τῷ τρισκαιδεκάτῳ -E, B.
[4] Turnebus ; οἳ -E, B.
[5] Madvig ; οὓς πετομένους -E, B.

[a] I have tried to preserve the ambiguity of Plutarch's language, though he probably meant to say " less than an

sight for less than an hour over a period of thirty days,[a]—and this is night, though it has a darkness that is slight and twilight glimmering from the west. There they spend ninety days regarded with honour and friendliness as holy men and so addressed, and then winds carry them across to their appointed goal.[b] Nor do any others inhabit it but themselves and those who have been dispatched before them, for, while those who have served the god together for the stint of thirty years are allowed to sail off home, most of them usually choose to settle in the spot, some out of habit and others because without toil or trouble they have all things in abundance while they constantly employ their time in sacrifices and celebrations or with various discourse and philosophy, for the nature of the island is marvellous as is the softness of the circumambient air. Some when they intend to sail away are even hindered by the divinity which presents itself to them as to intimates and friends not in dreams only or by means of omens, but many also come upon the visions and the voices of spirits manifest. For Cronus himself sleeps confined in a deep cave of rock that shines like gold—the sleep that Zeus has contrived as a bond for him—, and birds flying in over the summit of the rock bring

hour each day for thirty days" (so Kepler understood, who thought that the reference was to Greenland). For the length of summer-days in Britain and in Thule *cf.* Cleomedes, i. 7. 37-38 (pp. 68. 6–70. 22 [Ziegler]) and Pytheas and Crates in Geminus, vi. 9-21 (pp. 70-76 [Manitius]). Pliny, *Nat. Hist.* iv. 16 (104) says that in Thule at the summer solstice there is no night at all, *i.e.* while the sun is in Cancer ; but he adds here, what he had before (ii. 75 [186-187]) ascribed to Pytheas, that some think that in Thule there is a continuous day of six months' duration.

[b] *Cf. Class. Phil.* xlvi (1951), p. 149 and note 91.

(941) ἐπιφέρειν αὐτῷ, καὶ τὴν νῆσον εὐωδίᾳ κατέχεσθαι
942 πᾶσαν ὥσπερ ἐκ πηγῆς σκιδναμένῃ τῆς πέτρας. τοὺς δὲ δαίμονας ἐκείνους περιέπειν καὶ θεραπεύειν τὸν Κρόνον, ἑταίρους αὐτῷ γενομένους ὅτε δὴ θεῶν καὶ ἀνθρώπων ἐβασίλευσε,[1] καὶ πολλὰ μὲν ἀφ' ἑαυτῶν μαντικοὺς ὄντας προλέγειν τὰ δὲ μέγιστα καὶ περὶ τῶν μεγίστων ὡς ὀνείρατα τοῦ Κρόνου κατιόντας ἐξαγγέλλειν[2]· ὅσα γὰρ ὁ Ζεὺς προδιανοεῖται[3] ταῦτ' ὀνειροπολεῖν τὸν Κρόνον, εἶναι δ' ἀνάτασιν[4] τὰ τιτανικὰ πάθη καὶ κινήματα τῆς ψυχῆς ⟨ἕως⟩ ἂν[5] αὐτῷ πάλιν ἀνάπαυσιν[6] ὁ ὕπνος ⟨καταστήσῃ⟩[7] καὶ γένηται τὸ βασιλικὸν καὶ θεῖον
B αὐτὸ καθ' ἑαυτὸ καθαρὸν καὶ ἀκήρατον. ἐνταῦθα δὴ κομισθείς, ὡς ἔλεγεν, ὁ ξένος καὶ θεραπεύων τὸν θεὸν ἐπὶ σχολῆς ἀστρολογίας μὲν ἐφ' ὅσον ⟨γε⟩[8] γεωμετρήσαντι πορρωτάτω προελθεῖν δυνατὸν

1 E, B ; ἐβασίλευε -Emperius.
2 E ; ἐξαγγέλειν -B.
3 E ; προσδιανοεῖται -B.
4 H. C. ; ἀνάστασιν -E, B.
5 After Bernardakis's ψυχῆς ⟨ἕως ἂν⟩ ἐν ; ψυχῆς ἐν -E, B.
6 H. C. ; παντάπασιν -E, B.
7 H. C. ; ὁ ὕπνος vac. 10-E, 13-B.
8 H. C. ; ὅσον vac. 2-E, 3-B.

[a] For the sleep of Cronus as his bonds and for the spirits who are his servitors *cf. De Defectu Oraculorum*, 420 A. For the sleeping Cronus *cf.* also Kern, *Orphicorum Fragmenta*, frags. 149 and 155 ; in these "Orphic" or Neo-Platonic passages, however, Cronus prophesies, furnishes Zeus with plans, or thinks the world order *before* Zeus is aware of it (*cf.* Damascius, *Dub. et Sol.* 305 v-306 r [ii, pp. 136. 19–137. 8, Ruelle] and Proclus, *In Cratylum*, p. 53. 29 ff. [Pasquali]), which is the opposite of what Plutarch's words imply. Because of Tertullian, *De Anima*, 46. 10 (f. 156) J. H. Waszink (Tertullian, *De Anima*, p. 496) thinks it certain that the ultimate source of the story was one of Aristotle's lost

ambrosia to him, and all the island is suffused with fragrance scattered from the rock as from a fountain; and those spirits mentioned before tend and serve Cronus, having been his comrades what time he ruled as king over gods and men. Many things they do foretell of themselves, for they are oracular; but the prophecies that are greatest and of the greatest matters they come down and report as dreams of Cronus, for all that Zeus premeditates Cronus sees in his dreams [a] and the titanic affections and motions of his soul make him rigidly tense ⟨until⟩ sleep ⟨restores⟩ his repose once more and the royal and divine element is all by itself, pure and unalloyed.[b] Here then the stranger [c] was conveyed, as he said, and while he served the god became at his leisure acquainted with astronomy, in which he made as much progress as one can by practising geometry,

dialogues. Pohlenz (*R.E.* xi. 2013. *s.v.* "Kronos") supposes that Plutarch's source was Posidonius and that Posidonius was inspired by Nordic legend!

The feature of the birds that bring Cronus ambrosia appears to have been adapted from the story of Zeus's nectar; *cf. Sept. Sap.* 156 F and *Odyssey*, xii. 63-65.

Besides J. H. Waszink (Tertullian, *De Anima*, p. 496) see the same author's articles in *Vigiliae Christianae*, i (1947), pp. 137-149 (especially pp. 145-149) and in *Mélanges Henri Grégoire*, ii (1950), pp. 639-653 (especially pp. 651-653). Waszink mistakenly believes that in Plutarch's story "special demons convey to Zeus [the thoughts that arise in Cronus's dreams] who makes use of them for his government of the universe," and consequently he overlooks the important difference between Plutarch's version and the "Orphic" passages that I have pointed out in this note.

[b] *Cf. Class. Phil.* xlvi (1951), pp. 149-150.

[c] This is the first mention of "the stranger," unless he was referred to in the lost beginning of the dialogue. Hitherto he has merely been implied by the indirect discourse and τὸν ποιητήν in 941 A *supra*; *cf.* the reference in note *c* there.

(942) ἐστιν ἐμπειρίαν ἔσχε φιλοσοφίας δὲ τῆς ἄλλης τῷ φυσικῷ χρώμενος. ἐπιθυμίαν δέ τινα καὶ πόθον ἔχων γενέσθαι τῆς μεγάλης νήσου θεατής (οὕτως[1] γὰρ ὡς ἔοικε τὴν παρ' ἡμῖν οἰκουμένην ὀνομάζουσιν), ἐπειδὴ[2] τὰ τριάκοντ' ἔτη διῆλθεν ἀφικομένων τῶν διαδόχων οἴκοθεν ἀσπασάμενος[3] τοὺς φίλους ἐξέπλευσε, τὰ μὲν ἄλλα κατεσκευασμένος εὐσταλῶς[4] ἐφόδιον δὲ συχνὸν ἐν[5] χρυσοῖς ἐκπώμασι κομίζων. ἃ μὲν οὖν ἔπαθε καὶ ὅσους ἀνθρώπους
C διῆλθεν, ἱεροῖς τε γράμμασιν ἐντυγχάνων ἐν τελεταῖς τε[6] πάσαις τελούμενος, οὐ μιᾶς ἡμέρας ἔργον ἐστὶ διελθεῖν ὡς ἐκεῖνος ἡμῖν ἀπήγγελλεν εὖ μάλα καὶ καθ' ἕκαστον ἀπομνημονεύων, ὅσα δ' οἰκεῖα τῆς ἐνεστώσης διατριβῆς ἐστιν ἀκούσατε. πλεῖστον γὰρ ἐν Καρχηδόνι χρόνον διέτριψεν ἅτε δὴ παρ' ἡμῖν μεγάλας ἔχοντος ⟨τοῦ Κρόνου τιμάς⟩,[7] καί τινας ὅθ' ἡ προτέρα πόλις ἀπώλλυτο διφθέρας ἱερὰς ὑπεκκομισθείσας κρύφα καὶ διαλαθούσας πολὺν χρόνον ἐν γῇ κειμένας ἐξεῦρεν.[8] τῶν τε φαινομένων θεῶν ἔφη χρῆναι καί μοι παρεκελεύετο τιμᾶν διαφερόντως τὴν σελήνην ὡς τοῦ βίου κυριωτάτην

[1] E; οὕτω -B.
[2] Madvig; ἐπεὶ δὲ -E, B.
[3] E: ἀσπασαμένους -B.
[4] -Anon., Aldine, R.J. 94; εὐσταθῶς -E, B.
[5] E; omitted in B.
[6] E; τε omitted in B.
[7] Emperius: μεγάλας ἔχοντος καὶ τινάς -E, B, Aldine; μεγάλης ἔχοντος καὶ τιμάς -Basiliensis; μεγάλάς ἔχοντος ⟨τοῦ Κρόνου⟩ τιμάς· καὶ -Wyttenbach.
[8] Adler; ἐξευρεῖν -E, B; ἐξευρών -Basiliensis.

[a] φιλοσοφίας . . . χρώμενος is highly condensed; it must

and with the rest of philosophy by dealing with so much of it as is possible for the natural philosopher.[a] Since he had a strange desire and longing to observe the Great Island (for so, it seems, they call our part of the world), when the thirty years had elapsed, the relief-party having arrived from home, he saluted his friends and sailed away, lightly equipped for the rest but carrying a large viaticum in golden beakers. Well, all his experiences and all the men whom he visited, encountering sacred writings and being initiated in all rites—to recount all this as he reported it to us, relating it thoroughly and in detail, is not a task for a single day; but listen to so much as is pertinent to the present discussion. He spent a great deal of time in Carthage inasmuch as ⟨Cronus⟩ receives great ⟨honour⟩ in our country,[b] and he discovered certain sacred parchments that had been secretly spirited off to safety when the earlier city was being destroyed and had lain unnoticed in the ground for a long time.[c] Among the visible gods [d] he said that one should especially honour the moon, and so he kept exhorting me to do, inasmuch as she

be construed: *φιλοσοφίας δὲ τῆς ἄλλης (ἐμπειρίαν ἔσχε), χρώμενος (αὐτῇ ἐφ' ὅσον) τῷ φυσικῷ (δυνατόν ἐστιν).* For the distinction between *ἀστρολογία* and *φυσική* here referred to *cf.* Geminus's quotation of Posidonius in Simplicius, *Physica*, pp. 291. 23–292. 9 (Diels).

[b] For the special position of Cronus at Carthage *cf. De Superstitione*, 171 c, *De Sera Numinis Vindicta*, 552 A: Diodorus, v. 66. 5.

[c] Nothing in the subsequent account supports the frequently expressed notion that the myth is supposed to have been discovered in these parchments, and 945 D *infra* expressly invalidates any such assumption.

[d] *Cf. Timaeus*, 40 D (*τὰ περὶ θεῶν ὁρατῶν*), 41 A (*ὅσοι περιπολοῦσιν φανερῶς . . . θεοί*); *Epinomis*, 985 D (*τοὺς ὄντως ἡμῖν φανεροὺς ὄντας θεούς*).

(942) οὖσαν ⟨καὶ τοῦ θανάτου, τῶν Ἅιδου λειμώνων⟩[1] ἐχομένην.

27. Θαυμάζοντος δ' ἐμοῦ[2] ταῦτα καὶ δεομένου D σαφέστερον ἀκοῦσαι 'πολλὰ' εἶπεν[3] 'ὦ Σύλλα περὶ θεῶν οὐ πάντα δὲ καλῶς λέγεται παρ' Ἕλλησιν. οἷον εὐθὺς ὀρθῶς Δήμητραν[4] καὶ Κόρην ὀνομάζοντες οὐκ ὀρθῶς ὁμοῦ καὶ περὶ τὸν αὐτὸν ἀμφοτέρας εἶναι τόπον νομίζουσιν· ἡ μὲν γὰρ ἐν γῇ καὶ κυρία τῶν περὶ γῆν ἐστιν ἡ δ' ἐν σελήνῃ καὶ τῶν περὶ σελήνην.[5] Κόρη τε καὶ Φερσεφόνη[6] κέκληται τὸ μὲν ὡς φωσφόρος[7] οὖσα Κόρη δ' ὅτι καὶ τοῦ ὄμματος ἐν ᾧ τὸ εἴδωλον ἀντιλάμπει τοῦ βλέποντος ὥσπερ τὸ ἡλίου φέγγος ἐνορᾶται τῇ σελήνῃ κόρην προσαγορεύομεν. τοῖς τε περὶ τὴν E πλάνην καὶ τὴν ζήτησιν αὐτῶν λεγομένοις ἔνεστιν

[1] H. C. (*cf.* 942 F, 943 C *infra*: *De Genio Socratis*, 591 A-C): οὖσαν vac. 31-E, 24-B.

[2] Bernardakis; δέ μου -E, B.

[3] Stephanus (1624); εἰπεῖν -E, B, Aldine, Basiliensis.

[4] E, B (so MSS. at *De Iside*, 367 C, *De Esu Carn.* 994 A, *Adv. Coloten*, 1119 E; *cf.* Allen and Sikes, *The Homeric Hymns*, note on the title of *Hymn II*).

[5] E: περὶ τὴν σελήνην -B.

[6] Dübner (*cf.* 943 B *infra*); περσεφόνη -E, B.

[7] E; φοσφόρος -B.

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[a] Here Sulla begins to quote the stranger directly and continues his direct quotation to the end of the myth in 945 D.

[b] For identification of Persephonê and the moon *cf.* Epicharmus, frag. B 54 (i, p. 207. 9-11 [Diels-Kranz]=Ennius in Varro, *De Lingua Latina*, v. 68); Porphyry, *De Antro Nymph.* 18: Iamblichus in John Laurentius Lydus, *De Mensibus*, iv. 149; Martianus Capella, ii. 161-162. Plutarch in *De Iside*, 372 D notices the identification of Isis and the moon and in 361 E that of Isis and Persephassa (*cf.* note *c* on 922 A *supra* for Athena). The Pythagoreans are said to have called the planets "the hounds of Persephonê" (Por-

is sovereign over life ⟨and death⟩, bordering as she does ⟨upon the meads of Hades⟩.

27. When I expressed surprise at this and asked for a clearer account, he said[a]: 'Many assertions about the gods, Sulla, are current among the Greeks, but not all of them are right. So, for example, although they give the right names to Demeter and Cora, they are wrong in believing that both are together in the same region. The fact is that the former is in the region of earth and is sovereign over terrestrial things, and the latter is in the moon and mistress of lunar things. She has been called both Cora and Phersephonê,[b] the latter as being a bearer of light[c] and Cora because that is what we call the part of the eye in which is reflected the likeness of him who looks into it[d] as the light of the sun is seen in the moon. The tales told of the wandering and the quest of these goddesses contain the truth

phyry, *Vita Pythag.* 41 = Aristotle, frag. 196; Clement, *Stromat.* v. 50 [676 P, 244 S]); and Plutarch in *De Defectu Oraculorum*, 416 E refers to some who call the moon χθονίας ὁμοῦ καὶ οὐρανίας κλῆρον Ἑκάτης (*cf. De Iside*, 368 E). *Cf.* further, Roscher, *Über Selene und Verwandtes*, pp. 119 ff.

[c] *Cf.* for the ancient etymologies of Φερσεφόνη Bräuninger, *R.E.* xix. 1. 946-947, and Roscher, *Lexicon*, ii. 1288; there seems to be no ancient parallel to the one given here, to which Plutarch does not refer in *De Iside*, 377 D, where he mentions the etymology proposed by Cleanthes. In the *Orphic Hymn* to Persephonê (xxix. 9 = *Orphica*, rec. E. Abel, p. 74. 9) the epithet, φαεσφόρος, is used of the goddess but not by way of etymology (*cf.* line 16); nor is she expressly identified with the moon, although she is called φαεσφόρος, ἀγλαόμορφε, . . . εὐφεγγές, κερόεσσα.

[d] *Cf.* [Plato], *Alcibiades I*, 133 A. The word κόρη means "girl," "maiden," for which reason it was used of such goddesses as Athena and Persephonê, and also "doll," whence like Latin "pupilla" it came to mean the pupil of the eye; *cf.* English "the baby in the eye."

(942) ⟨ἠνιγμένον⟩ τὸ[1] ἀληθές· ἀλλήλων γὰρ ἐφίενται χωρὶς οὖσαι καὶ συμπλέκονται περὶ τὴν σκιὰν πολλάκις. τὸ δὲ νῦν[2] μὲν ἐν οὐρανῷ καὶ φωτὶ νῦν δ' ἐν σκότῳ καὶ νυκτὶ γενέσθαι περὶ τὴν Κόρην ψεῦδος μὲν οὐκ ἔστιν, τοῦ δὲ χρόνου[3] τῷ ἀριθμῷ πλάνην παρέσχηκεν. οὐ γὰρ ἓξ μῆνας ἀλλὰ παρ' ἓξ μῆνας ὁρῶμεν αὐτὴν ὑπὸ τῆς γῆς ὥσπερ ὑπὸ τῆς μητρὸς τῇ σκιᾷ λαμβανομένην ὀλιγάκις δὲ τοῦτο διὰ πέντε
F μηνῶν πάσχουσαν,[4] ἐπεὶ[5] τόν γ' Ἅιδην ἀπολιπεῖν ἀδύνατόν ἐστιν αὐτὴν τοῦ Ἅιδου πέρ⟨ας⟩[6] οὖσαν, ὥσπερ καὶ Ὅμηρος ἐπικρυψάμενος οὐ φαύλως τοῦτ' εἶπεν

ἀλλ' εἰς Ἠλύσιον πεδίον καὶ πείρατα γαίης·

ὅπου γὰρ ἡ σκιὰ τῆς γῆς ἐπινεμομένη παύεται τοῦτο τέρμα τῆς γῆς ἔθετο καὶ πέρας. εἰς δὲ τοῦτο φαῦλος μὲν οὐδεὶς οὐδ' ἀκάθαρτος ἄνεισιν, οἱ δὲ

[1] H. C. ; ἔνεστιν vac. 7-E ; ἔνεστι vac. 9-B.
[2] Basiliensis ; ὁ δὲ νῦν -E, B.
[3] Raingeard ; οὐδὲ χρόνου -E, B ; ὁ δὲ χρόνος -Anon., Aldine, R.J. 94.
[4] Wyttenbach ; παροῦσαν -E, B ; παθοῦσαν -Kaltwasser.
[5] Stephanus (1624) ; ἐπὶ -E (at end of line with 2 or 3 letter-spaces possibly vacant after it), B (no lacuna).
[6] Turnebus ; περ οὖσαν -E, B.

[a] *i.e.* the wandering of Demeter in search of Persephonê after the abduction of the latter by Hades: *cf. e.g.* the *Homeric Hymn II* to Demeter and Apollodorus, *Bibliotheca*, i. 5. In the myth, however, Demeter was the wanderer; but the earth, which she is here supposed to represent, is stationary. In the myth Persephonê is in darkness when she is separated from her mother and with Hades, whereas Plutarch's interpretation requires that Persephonê, the moon, be in darkness and night when she is in the embrace of her mother, the earth.

[b] *Cf.* 933 E *supra* and *De Genio Socratis*, 591 C: σελήνη . . . φεύγει τὴν Στύγα μικρὸν ὑπερφέρουσα λαμβάνεται δ' ἅπαξ ἐν

⟨spoken covertly⟩,[a] for they long for each other when they are apart and they often embrace in the shadow. The statement concerning Cora that now she is in the light of heaven and now in darkness and night is not false but has given rise to error in the computation of the time, for not throughout six months but every six months we see her being wrapped in shadow by the earth as it were by her mother, and infrequently we see this happen to her at intervals of five months,[b] for she cannot abandon Hades since she is the boundary of Hades, as Homer too has rather well put it in veiled terms :

> But to Elysium's plain, the bourne of earth.[c]

Where the range of the earth's shadow ends, this he set as the term and boundary of the earth.[d] To this point rises no one who is evil or unclean, but the good

μέτροις δευτέροις ἑκατὸν ἑβδομήκοντα ἑπτά (177 days = one-half of a lunar year, 6 synodic months).

[c] *Odyssey*, iv. 563 but with ἀλλά σ' ἐς instead of ἀλλ' εἰς.

[d] *Cf.* Stobaeus, *Eclogae*, i. 49 (i, p. 448. 5-16 [Wachsmuth]) = frag. 146 β (vii, p. 176 [Bernardakis]), where *Odyssey*, iv. 563-564 is taken to indicate that the region of the moon is the seat of righteous souls after death (*cf.* Eustathius, *Ad Odysseam*, 1509. 18). There Ἠλύσιον πεδίον is said to mean the surface of the moon lighted by the sun (*cf.* 944 c *infra*) and πείρατα γαίης the end of the earth's shadow which often touches the moon ; but there is no mention of Hades, Persephonê, or Demeter. In the present passage Plutarch does not say why his interpretation of Homer's line justifies him in calling the moon τοῦ Ἅιδου πέρας, but the rest of the myth makes it certain that Hades is the region between earth and moon (*cf.* 943 c *infra*). This agrees with the myth of *De Genio Socratis*, where (591 A-C) this region is "the portion of Persephonê" and the earth's shadow is "Styx" and "the road to Hades" and where (590 F) Hades and Earth are clearly identical (*cf.* Heinze, *Xenokrates*, p. 135 ; R. M. Jones, *The Platonism of Plutarch*, p. 57 and n. 147). Probably then Plutarch here thought that, if Homer could be

(942) χρηστοὶ μετὰ τὴν τελευτὴν κομισθέντες αὐτόθι ῥᾷστον μὲν οὕτως[1] βίον οὐ μὴν μακάριον οὐδὲ θεῖον ἔχοντες ἄχρι τοῦ δευτέρου θανάτου διατελοῦσι.

28. Τίς δ' οὗτός ἐστιν, ὦ Σύλλα; μὴ περὶ τούτων
943 ἔρῃ. μέλλω γὰρ αὐτὸς διηγεῖσθαι. τὸν ἄνθρωπον οἱ πολλοὶ σύνθετον μὲν ὀρθῶς ἐκ δυεῖν[2] δὲ μόνον[3] σύνθετον οὐκ ὀρθῶς ἡγοῦνται. μόριον γὰρ εἶναί πως ψυχῆς οἴονται τὸν νοῦν, οὐδὲν ἧττον ἐκείνων ἁμαρτάνοντες οἷς ἡ ψυχὴ δοκεῖ μόριον εἶναι τοῦ σώματος· νοῦς γὰρ ψυχῆς ὅσῳ ψυχὴ σώματος ἄμεινόν ἐστι καὶ θειότερον. ποιεῖ δ' ἡ μὲν ψυχῆς ⟨καὶ σώματος μῖξις τὸ ἄλογον καὶ τὸ παθητικὸν ἡ δὲ νοῦ καὶ ψυχῆς⟩[4] σύνοδος λόγον, ὧν τὸ μὲν ἡδονῆς ἀρχὴ καὶ πόνου τὸ δ' ἀρετῆς καὶ κακίας. τριῶν

[1] E ; οὕτω -B.
[2] Bernardakis : δυοῖν -E, B.
[3] B ; μόνων -E.
[4] Bernardakis (*cf.* 943 D *infra*) ; ἡ μὲν ψυχῆς σύνοδος -E, B ; "et fait ceste composition de l'ame avec l'entendement la raison, et avec le corps la passion . . ." -Amyot.

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shown to have set the boundary of earth at the moon, it follows that he understood the moon to be the boundary of Hades. In *De Genio Socratis*, 591 B the moon is expressly made the boundary between "the portion of Persephonê," which is Hades, and the region which extends from moon to sun. Nevertheless, in 944 C *infra* the Elysian plain is said to be the part of the moon that is turned to heaven, *i.e. away* from the earth: and, though this does not explicitly contradict the present passage, it might still seem to suggest the notion ascribed to Iamblichus by John Laurentius Lydus (*De Mensibus*, iv. 149 [p. 167. 24 ff.]) : . . . τὸν ὑπὲρ σελήνης ἄχρις ἡλίου χῶρον τῷ Ἅιδῃ διδούς, παρ' ᾧ φησὶ καὶ τὰς ἐκκεκαθαρμένας ἑστάναι ψυχάς, καὶ αὐτὸν μὲν εἶναι τὸν Πλούτωνα, Περσεφόνην δὲ τὴν σελήνην.

[a] *Cf. Odyssey*, iv. 565 : τῇ περ ῥηΐστη βιοτὴ πέλει ἀνθρώποισιν.

[b] In *Quaest. Rom.* 282 A Plutarch cites Castor (*cf.* 266 E)

are conveyed thither after death and there continue to lead a life most easy to be sure [a] though not blessèd or divine until their second death.[b]

28. And what is this, Sulla ? Do not ask about these things, for I am going to give a full explanation myself. Most people rightly hold man to be composite but wrongly hold him to be composed of only two parts. The reason is that they suppose mind to be somehow part of soul, thus erring no less than those who believe soul to be part of body, for in the same degree as soul is superior to body so is mind better and more divine than soul. The result of soul ⟨and body commingled is the irrational or the affective factor, whereas of mind and soul⟩ the conjunction produces reason ; and of these the former is source of pleasure and pain, the latter of virtue and vice.[c]

for the notion that after death souls dwell on the moon, for which *cf.* in general P. Capelle, *De luna stellis lacteo orbe animarum sedibus* (Halis Saxonum, 1917), pp. 1-18 and *n.b.* Iamblichus, *Vit. Pyth.* 18. 82 ; Varro in Augustine, *De Civ. Dei*, vii. 6 (i, p. 282. 14-17 [Dombart]) ; *S.V.F.* ii, frag. 814.

[c] *Cf. De Virtute Morali*, 441 D—442 A, *De Genio Socratis*, 591 D-E. The ultimate source of Plutarch's conception of the relation of mind, soul, and body is such passages of Plato as *Timaeus*, 30 B, 41-42, 90 A ; *Laws*, 961 D-E, *Phaedrus*, 247 C (*cf.* Thévenaz, *L'Ame du monde . . . chez Plutarque*, pp. 70-73). Plutarch himself ascribes the twofold division, soul and body, to *οἱ πολλοί* and so cannot intend a reference to any philosophical school ; by those who make soul a *μόριον τοῦ σώματος* he might mean Stoics (*cf. De Stoicorum Repugnantiis*, 1052 F ff., *De Communibus Notitiis*, 1083 C ff.) but might equally well mean Epicureans or materialists generally. Against Adler's argument (*Diss. Phil. Vind.* x, pp. 171-172) that the first of the two notions rejected is Platonic and the second Stoic, so that Plutarch's source must have been Posidonius, *cf.* Pohlenz, *Phil. Woch.* xxxii (1912), p. 653, and R. M. Jones, *The Platonism of Plutarch*, p. 55.

(943) δὲ τούτων συμπαγέντων τὸ μὲν σῶμα ἡ γῆ τὴν δὲ ψυχὴν ἡ σελήνη τὸν δὲ νοῦν ὁ ἥλιος παρέσχεν εἰς τὴν γένεσιν ⟨τἀνθρώπῳ⟩[1] ὥσπερ αὐ⟨τῇ⟩[2] τῇ σελήνῃ τὸ φέγγος. ὃν δ' ἀποθνῄσκομεν θάνατον, ὁ μὲν ἐκ τριῶν δύο ποιεῖ τὸν ἄνθρωπον ὁ δ' ἓν ἐκ
B δυεῖν,[3] καὶ ὁ μέν ἐστιν ἐν τῇ ⟨γῇ⟩[4] τῆς Δήμητρος ⟨(διὸ τελευτᾶν λέγεται τὸν βί⟩ον[5] αὐτῇ τελεῖν καὶ τοὺς νεκροὺς Ἀθηναῖοι Δημητρείους ὠνόμαζον τὸ παλαιόν) ⟨ὁ⟩[6] δ' ἐν τῇ σελήνῃ τῆς Φερσεφόνης,[7] καὶ σύνοικός ἐστι τῆς μὲν χθόνιος ὁ Ἑρμῆς τῆς δ' οὐράνιος. λύει δ' αὕτη[8] μὲν ταχὺ καὶ μετὰ βίας τὴν ψυχὴν ἀπὸ τοῦ σώματος ἡ δὲ Φερσεφόνη πράως καὶ χρόνῳ πολλῷ τὸν νοῦν ἀπὸ τῆς ψυχῆς καὶ διὰ τοῦτο μονογενὴς κέκληται· μόνον[9] γὰρ γίγνεται τὸ βέλτιστον τἀνθρώπου διακρινόμενον ⟨ὑπ'⟩[10] αὐτῆς.
C συντυγχάνει δ' οὕτως κατὰ φύσιν ἑκάτερον· πᾶσαν

1 Bernardakis ; γένεσιν vac. 7-E, 11-B.
2 Raingeard ; ὥς περ αὖ -E ; ὥς περ οὖν -B.
3 Bernardakis ; δυοῖν -E, B.
4 Madvig ; ἐν τῇ τῆς -E, B.
5 H. C. : Δήμητρος vac. 20-E, 26-B ἐν.
6 Kaltwasser ; τὸ παλαιὸν δὲ ἐν -E, B.
7 E[1], B ; περσεφόνης -E[2].
8 Bernardakis : αὐτῇ -E, B.
9 Stephanus (1624) ; μόνη -E, B ; possibly μόνῃ (*cf.* L and S, *s.v.* μόνος, B IV).
10 Stephanus (1624) ; διακρινόμενον αὐτῆς -E, B.

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a *Cf. De Genio Socratis*, 591 B, where motion and generation are linked by Mind in the sun and generation and destruction by Nature in the moon.

b For a "mortal soul" or "mortal part" of the soul *cf.* Plato, *Timaeus*, 42 D, 61 C, 69 C-D.

In the composition of these three factors earth furnishes the body, the moon the soul, and the sun furnishes mind ⟨to man⟩ for the purpose of his generation [a] even as it furnishes light to the moon herself. As to the death we die, one death reduces man from three factors to two and another reduces him from two to one [b]; and the former takes place in the ⟨earth⟩ that belongs to Demeter ⟨(wherefore "to make an end" is called⟩ "to render ⟨one's life⟩ to her" and Athenians used in olden times to call the dead "Demetrians"),[c] ⟨the latter⟩ in the moon that belongs to Phersephonê, and associated with the former is Hermes the terrestrial, with the latter Hermes the celestial.[d] While the goddess here [e] dissociates the soul from the body swiftly and violently, Phersephonê gently and by slow degrees detaches the mind from the soul and has therefore been called "single-born" because the best part of man is "born single" when separated off ⟨by⟩ her.[f] Each of the two separations naturally occurs in this

[c] *Cf. Class. Phil.* xlvi (1951), p. 151.

[d] *Cf. De Iside*, 367 D-E. Hermes appears in the myth of Persephonê as early as *Homeric Hymn II*, 377 ff. and is connected with Hecatê in the fragment of Theopompus in Porphyry, *De Abstinentia*, ii. 16. *Cf.* also *Quaest. Graec.* 296 F and Halliday's note *ad loc.*

[e] *i.e.* on earth, Demeter, which is why Plutarch refers to her with αὕτη, though she is the former of the two mentioned.

[f] μονογενής, which appears as an epithet of Hecatê and Persephonê (*cf.* Hesiod, *Theogony*, 426; *Orphic Hymns*, xxix. 1-2 [Abel]; Apollonius Rhodius, iii. 847), means "unique": *cf. Timaeus*, 31 B and 92 C, to which Plutarch refers in *De Defectu Oraculorum*, 423 A and C, where he interprets the word to mean "only born." Here, however, he probably takes the final element in an active sense such as it has in Καλλιγένεια, an epithet of Demeter, the moon, and the earth.

(943) ψυχήν, ἄνουν τε καὶ σὺν νῷ, σώματος ἐκπεσοῦσαν εἱμαρμένον ἐστὶν ⟨ἐν⟩[1] τῷ μεταξὺ γῆς καὶ σελήνης χωρίῳ[2] πλανηθῆναι χρόνον οὐκ ἴσον, ἀλλ' αἱ μὲν ἄδικοι καὶ ἀκόλαστοι δίκας τῶν ἀδικημάτων τίνουσι τὰς δ' ἐπιεικεῖς ὅσον ἀφαγνεῦσαι καὶ ἀποπνεῦσαι ⟨τοὺς⟩[3] ἀπὸ τοῦ σώματος ὥσπερ ἀτμοῦ[4] πονηροῦ μιασμοὺς ἐν τῷ πραοτάτῳ τοῦ ἀέρος, ὃν λειμῶνας Ἅιδου καλοῦσι, δεῖ γίγνεσθαι χρόνον τινὰ τεταγμένον. ⟨εἶθ'⟩[5] οἷον ἐξ ἀποδημίας ἀνακομιζόμεναι φυγαδικῆς εἰς πατρίδα γεύονται χαρᾶς οἵαν[6] οἱ τελούμενοι μάλιστα θορύβῳ καὶ πτοήσει συγ-

[1] Wyttenbach; ἐστὶ τῷ μεταξὺ -E, B.
[2] E, B; χώρῳ -Papabasileios.
[3] Emperius; ἀποπνεῦσαι ἀπὸ -E, B.
[4] Emperius; αἰτίου -E, B.
[5] Basiliensis (εἶτα); omitted by E, B.
[6] Editors after οἷαν (*sic*) of Basiliensis; οἷον -E, B.

[a] This may mean only "whether the soul has been obedient to reason in life or has not but ὅλη κατέδυ εἰς σῶμα," as *De Genio Socratis*, 591 D-E puts it; but at 945 B *infra* Plutarch speaks of souls which ἄνευ νοῦ assume bodies and live on earth, and by ἄνουν here he may intend to refer to the separation of such souls from their bodies. He cannot mean, as Raingeard supposes, souls whose minds have immediately passed to the sun, for he has just said that the separation of mind from soul takes place at the *second* death on the moon and neither here nor in 944 F *infra* does he allow for any exception in the sense of the doctrine of the *Hermetic Tractate*, x. 16, where νοῦς is separated from ψυχή at the moment when

fashion : All soul, whether without mind or with it,[a] when it has issued from the body[b] is destined to wander ⟨in⟩ the region between earth and moon but not for an equal time. Unjust and licentious souls pay penalties for their offences ; but the good souls must in the gentlest part of the air, which they call "the meads of Hades,"[c] pass a certain set time sufficient to purge and blow away ⟨the⟩ pollutions contracted from the body as from an evil odour.[d] ⟨Then⟩, as if brought home from banishment abroad, they savour joy most like that of initiates, which attended by glad expectation is mingled with con-

the soul leaves the body (*cf.* Scott, *Hermetica*, ii, p. 265). In *De Genio Socratis*, 591 D—592 D Plutarch makes νοῦς and ψυχή not really two different substances as here in the *De Facie* but considers ψυχή to be a degeneration of νοῦς.

[b] *Cf. De Sera Numinis Vindicta*, 563 E : ἐπεὶ γὰρ ἐξέπεσε τὸ φρονοῦν τοῦ σώματος . . .

[c] For the location of Hades *cf. De Iside*, 382 E and the etymology in *De Latenter Vivendo*, 1130 A (*cf.* Plato, *Gorgias*, 493 B and *Phaedo*, 80 D); for the identification of Hades with the dark air *cf.* [Plutarch], *De Vita et Poesi Homeri*, § 97 ; Philodemus, *De Pietate*, c. 13 (*Dox. Graeci*, p. 547 b) ; Cornutus, c. 5 and c. 35 ; Heraclitus, *Quaestiones Homericae*, § 41. Reference to a mead (λειμών) or meads in the underworld is common: *cf. Odyssey*, xi. 539, 573 and xxiv. 13-14 ; Kern, *Orphicorum Fragmenta*, 32 f 6 and 222 ; Plato, *Gorgias*, 524 A, *Republic*, 614 E and 616 B. The Neo-Platonists argued that the λειμών in these Platonic passages is meant to be located in the atmosphere under the moon : Proclus, *In Rem Publicam*, ii, pp. 132. 20–133. 15 (Kroll) ; Olympiodorus, *In Gorgiam*, p. 237. 10-13 (Norvin) ; Hermias, *In Phaedrum*, p. 161. 3-9 (Couvreur).

[d] *Cf. De Antro Nymph.* §§ 11-12 (p. 64. 24-25 [Nauck]) ; Proclus, *In Timaeum*, iii, p. 331. 6-9 (Diehl) ; and in general on the pollution of the soul by association with the body Plato, *Phaedo*, 81 B-C. Plutarch in a different context uses the words : . . . ὅταν ἀτμοὶ πονηροί . . . ταῖς τῆς ψυχῆς . . . ἀνακραθῶσι περιόδοις (*De Tuenda Sanitate*, 129 C).

(943) κεκραμένην[1] μετ' ἐλπίδος ἡδείας[2] ἔχουσι· πολλὰς D γὰρ ἐξωθεῖ καὶ ἀποκυματίζει γλιχομένας ἤδη τῆς σελήνης ἐνίας δὲ καὶ τῶν ἐκεῖ περικάτω[3] τρεπομένας οἷον εἰς βυθὸν αὖθις ὁρῶσι καταδυομένας.[4] αἱ δ' ἄνω γενόμεναι καὶ βεβαίως ἱδρυθεῖσαι[5] πρῶτον μὲν ὥσπερ οἱ νικηφόροι περιίασιν[6] ἀναδούμεναι[7] στεφάνοις πτερῶν εὐσταθείας λεγομένοις ὅτι τῆς ψυχῆς τὸ ἄλογον καὶ τὸ παθητικὸν εὐήνιον ἐπιεικῶς τῷ λόγῳ καὶ κεκοσμημένον ἐν τῷ βίῳ παρέσχοντο. δεύτερον, ἀκτῖνι τὴν ὄψιν ἐοικυῖαι[8] περὶ δὲ τὴν φύσιν[9] ἄνω κουφιζομένην ὥσπερ ἐνταῦθα τῷ περὶ τὴν σελήνην αἰθέρι, καὶ τόνον ἀπ' αὐτοῦ[10] καὶ δυνα-

[1] Madvig ; συγκεκραμένη -E, B.
[2] Xylander in his version ; ἰδίας -E, B.
[3] Madvig ; περὶ κάτω -E, B.
[4] E : καταγινομένας -B.
[5] Wyttenbach ; ἱδρύθησαν -E, B.
[6] Wyttenbach : περιίστασιν -E ; περιιστᾶσιν -B.
[7] Hutten ; ἀναδούμενοι -E, B.
[8] Wyttenbach ; ἐοικέναι -E, B.
[9] Sandbach (who, however, reads πυρὶ for περὶ after Wyttenbach) : περὶ δὲ τὴν ψυχὴν -E, B.
[10] Wyttenbach : ἀφ' αὐτοῦ -E, B.

[a] For life on earth as the soul's exile from its proper home *cf. De Exilio*, 607 C-E ; and for the comparison with initiates and what follows in this vein a few lines below *cf.* fragment VI (vii, p. 23. 4-17 [Bernardakis]).

[b] *Cf. De Genio Socratis*, 591 C, and Plato's *Phaedrus*, 248 A-B, especially αἱ δὲ δὴ ἄλλαι γλιχόμεναι μὲν ἅπασαι τοῦ ἄνω ἕπονται, ἀδυνατοῦσαι δέ, ὑποβρύχιαι συμπεριφέρονται κτλ.

[c] For life as an athletic contest and the soul as athlete *cf. De Sera Numinis Vindicta*, 561 A, *De Genio Socratis*, 593 D-E and 593 F—594 A. The conception is Platonic (*cf. Republic*, 621 C-D, *Phaedrus*, 256 B) ; and it is irrelevant to cite oriental notions of life as a combat and immortality as a triumph as Soury does (*La Démonologie de Plutarque*, p. 189, n. 1) after

fusion and excitement.[a] For many, even as they are in the act of clinging to the moon, she thrusts off and sweeps away; and some of those souls too that are on the moon they see turning upside down as if sinking again into the deep.[b] Those that have got up, however, and have found a firm footing first go about like victors crowned with wreaths of feathers called wreaths of steadfastness,[c] because in life they had made the irrational or affective element of the soul orderly and tolerably tractable to reason[d]; secondly, in appearance resembling a ray of light but in respect of their nature, which in the upper region is buoyant as it is here in ours, resembling the ether about the moon,[e] they get from it both tension and strength

Cumont. Soury follows Raingeard in misconstruing *στεφάνοις . . . λεγομένοις* and supposing that *πτερῶν εὐσταθείας* is an "expression mystique" (*op. cit.* pp. 189 and 191-192). *εὐσταθείας* does not depend upon *πτερῶν* or *vice versa*; and Plutarch has simply woven the "feathers of the soul," which appear throughout the myth of the *Phaedrus*, into a wreath that is given to the souls of the good for their steadfastness, just as the victorious souls in *Phaedrus*, 256 B become *ὑπόπτεροι* because in life they were *ἐγκρατεῖς αὑτῶν καὶ κόσμιοι*.

[d] *Cf. De Genio Socratis*, 592 A, and Plato's *Phaedrus*, 247 B (*n.b. εὐήνια ὄντα ῥᾳδίως πορεύεται*).

[e] *αἰθήρ* for Plato was simply the uppermost and purest air (*cf. Timaeus*, 58 D, *Phaedo*, 109 B and 111 B); but here the word is probably used under Stoic influence, for which see note *d* on 928 D and note *g* on 922 B *supra* and *cf.* [Plato], *Axiochus*, 366 A (*ἡ ψυχὴ συναλγοῦσα τὸν οὐράνιον ποθεῖ καὶ σύμφυλον αἰθέρα*). These last sentences of chapter 28 show several definitely Stoic traits, especially the conception of "tension," nourishment of the soul by the exhalations, and the use of the quotation from Heraclitus. It has long been customary to compare with this passage Cicero, *Tusc. Disp.* i. 19, 43, and Sextus Empiricus, *Adv. Math.* ix. 71-73 (*cf.* Heinze, *Xenokrates*, pp. 126-128; K. Reinhardt, *Kosmos und Sympathie*, pp. 308-313 and p. 323: R. M. Jones, *Class. Phil.* xxvii [1932], pp. 113 ff.).

(943) μιν οἷον τὰ στομούμενα βαφὴν ἴσχουσι· τὸ γὰρ
E ἀραιὸν ἔτι καὶ διακεχυμένον ῥώννυται καὶ γίγνεται σταθερὸν καὶ διαυγὲς ὥσθ' ὑπὸ τῆς τυχούσης ἀναθυμιάσεως τρέφεσθαι, καὶ καλῶς Ἡράκλειτος εἶπεν ὅτι αἱ ψυχαὶ ὀσμῶνται καθ' Ἅιδην.

29. Ἐφορῶσι δὲ πρῶτον μὲν αὐτῆς σελήνης τὸ μέγεθος καὶ τὸ κάλλος καὶ τὴν φύσιν οὐχ ἁπλῆν οὐδ' ἄμικτον ἀλλ' οἷον ἄστρου σύγκραμα καὶ γῆς οὖσαν· ὡς γὰρ ἡ γῆ πνεύματι μεμιγμένη καὶ ὑγρό⟨τητι⟩[1] μαλακὴ γέγονε καὶ τὸ αἷμα τῇ σαρκὶ παρέχει τὴν αἴσθησιν ἐγκεκραμένον οὕτως[2] τῷ αἰθέρι λέγουσι τὴν σελήνην ἀνακεκραμένην διὰ βάθους ἅμα μὲν ἔμψυχον εἶναι καὶ γόνιμον ἅμα δ' ἰσόρροπον
F ἔχειν τὴν πρὸς τὸ βαρὺ συμμετρίαν τῆς κουφότητος. καὶ γὰρ αὐτὸν οὕτως[3] τὸν κόσμον ἐκ τῶν ἄνω καὶ τῶν[4] κάτω φύσει φερομένων συνηρμοσμένον ἀπηλλάχθαι παντάπασι τῆς κατὰ τόπον κινήσεως. ταῦτα

[1] Papabasileios ; ὑγρω vac. 5 -E, B.
[2] E ; οὕτω -B.
[3] E ; οὕτω -B.
[4] Stephanus (1624) : ἐν τῷ ἄνω καὶ τῷ -E, B.

[a] For the Stoic doctrine of τόνος *cf. De Stoicorum Repugnantiis*, 1054 A-B, *De Communibus Notitiis*, 1085 C-D, and *S.V.F.* ii, frags. 447 and 448. The metaphor of "tempering" was also commonly used by the Stoics in connection with the soul: *cf. S.V.F.* ii, frags. 804-806.

[b] Frag. 98 (i, p. 173. 3 [Diels-Kranz]). For the nourishment of disembodied souls *cf.* the passages of Cicero and

as edged instruments get a temper,[a] for what laxness and diffuseness they still have is strengthened and becomes firm and translucent. In consequence they are nourished by any exhalation that reaches them, and Heraclitus was right in saying: "Souls employ the sense of smell in Hades." [b]

29. First they behold the moon as she is in herself [c]: her magnitude and beauty and nature, which is not simple and unmixed but a blend as it were of star and earth. Just as the earth has become soft by having been mixed with breath and moist⟨ure⟩ and as blood gives rise to sense-perception in the flesh with which it is commingled,[d] so the moon, they say,[e] because it has been permeated through and through by ether is at once animated and fertile and at the same time has the proportion of lightness to heaviness in equipoise. In fact it is in this way too, they say, that the universe itself has entirely escaped local motion. because it has been constructed out of the things that naturally move upwards and those that naturally move downwards.[f] This was

Sextus cited in note *e*, p. 203. Here the argument of Lamprias in 940 C-D *supra* is incorporated into the myth, which thereby appears to substantiate the argument.

[c] Plutarch certainly wrote *αὐτῆς σελήνης* (or perhaps *αὐτῆς τῆς σελήνης*) under the influence of Plato's "true earth," *αὐτὴ ἡ γῆ*, in *Phaedo*, 109 B 7, 110 B 6 (*cf.* 935 A *supra* and 944 B *infra*).

[d] *Cf.* Aristotle, *De Part. Animal.* 656 B 19-21 and 25-26, 666 A 16-17; and Plato, *Timaeus*, 77 E on the connection of the blood-vessels with *τὸ τῶν αἰσθήσεων πάθος*.

[e] Not "the demons" who told the stranger the story, as Raingeard says, but the human authors of the theory mentioned in the next sentence; *cf. Class. Phil.* xlvi (1951), pp. 151-152.

[f] *Cf. S.V.F.* ii, frag. 555 and *Class. Phil.* xlvi (1951), p. 157, n. 105.

(943) δὲ καὶ Ξενοκράτης ἔοικεν ἐννοῆσαι θείῳ τινὶ λογισμῷ τὴν ἀρχὴν λαβὼν παρὰ Πλάτωνος. Πλάτων γάρ ἐστιν ὁ καὶ τῶν ἀστέρων ἕκαστον ἐκ γῆς καὶ πυρὸς συνηρμόσθαι διὰ τῶν ⟨δυεῖν⟩[1] μεταξὺ φύσεων ἀναλογίᾳ δεθεισῶν[2] ἀποφηνάμενος· οὐδὲν[3] γὰρ εἰς αἴσθησιν ἐξικνεῖσθαι ᾧ μή τι γῆς ἐμμέμικται καὶ φωτός. ὁ δὲ Ξενοκράτης τὰ μὲν ἄστρα καὶ τὸν
944 ἥλιον ἐκ πυρός φησι καὶ τοῦ πρώτου πυκνοῦ συγκεῖσθαι τὴν δὲ σελήνην ἐκ τοῦ δευτέρου πυκνοῦ καὶ τοῦ ἰδίου ἀέρος τὴν δὲ γῆν ἐξ ὕδατος [καὶ ἀέρος][4] καὶ τοῦ τρίτου τῶν πυκνῶν· ὅλως δὲ μήτε τὸ πυκνὸν αὐτὸ καθ' αὑτὸ μήτε τὸ μανὸν εἶναι ψυχῆς δεκτικόν. καὶ ταῦτα μὲν περὶ οὐσίας σελήνης. εὖρος δὲ καὶ μέγεθος οὐχ ὅσον οἱ γεωμέτραι λέγουσιν ἀλλὰ μεῖζον πολλάκις ἐστί. καταμετρεῖ δὲ τὴν σκιὰν τῆς γῆς ὀλιγάκις τοῖς ἑαυτῆς[5] μεγέθεσιν οὐχ ὑπὸ σμικρότητος, ἀλλὰ θερμ⟨ότερον⟩[6] ἐπείγει τὴν κίνησιν ὅπως ταχὺ διεκπερᾷ τὸν σκοτώδη τόπον ὑπεκφέρουσα ⟨τὰς⟩ τῶν ἀγαθῶν ⟨ψυχὰς⟩[7] σπευδούσας καὶ βοώσας· οὐκέτι γὰρ ἐξακούουσιν ἐν τῇ σκιᾷ γενόμεναι τῆς περὶ τὸν

[1] Purser ; διὰ τῶν vac. 4-E, 5-B.

[2] Leonicus (*cf.* Plato, *Timaeus*, 31 c, 32 b-c ; Plutarch, *De An. Proc.* 1016 f—1017 a) ; δοθεισῶν -E, B.

[3] -Anon., Aldine, R.J. 94 (*cf.* Plato, *Timaeus*, 31 b) ; οὐδένα -E, B.

[4] Excised by H. C. ; καὶ ἀέρος -E καὶ πυρὸς -B.

[5] E ; ἑαυτοῦ -B.

also the conception of Xenocrates who, taking his start from Plato, seems [a] to have reached it by a kind of superhuman reasoning. Plato is the one who declared that each of the stars as well was constructed of earth and fire bound together in a proportion by means of the ⟨two⟩ intermediate natures, for nothing, as he said, attains perceptibility that does not contain an admixture of earth and light [b]; but Xenocrates says that the stars and the sun are composed of fire and the first density, the moon of the second density and air that is proper to her, and the earth of water [and air] and the third kind of density and that in general neither density all by itself nor subtility is receptive of soul.[c] So much for the moon's substance. As to her breadth or magnitude, it is not what the geometers say but many times greater. She measures off the earth's shadow with few of her own magnitudes not because it is small but she more ardently hastens her motion in order that she may quickly pass through the gloomy place bearing away ⟨the souls⟩ of the good which cry out and urge her on because when they are in the shadow they no longer catch the sound

[a] The Greek does not imply, as Adler supposes, that Plutarch had any doubt about what Xenocrates had said (*cf.* R. M. Jones, *The Platonism of Plutarch*, p. 55).

[b] *Timaeus*, 40 A and 31 B—32 C; *cf.* [Plato], *Epinomis*, 981 D-E; Plutarch, *De Fortuna Romanorum*, 316 E-F. *Timaeus*, 31 B strictly requires *γῆς . . . καὶ πυρός* here; but according to *Timaeus*, 45 B and 58 C *φῶς* is the species of fire that produces visibility.

[c] Xenocrates, frag. 56 (Heinze): for text and implications *cf. Class. Phil.* xlvi (1951), p. 152.

6 Von Arnim; *θερμ* vac. 7 *ἐπείγει* -E; *θερμότητος ἐπείγει* -B; *θερμοτάτην ἐπείγει* -Anon., Aldine, R.J. 94.

7 Reiske; *ὑπεκφέρουσα τῶν ἀγαθῶν σπευδούσας* -E, B; *ὑπεκφέρουσα ψυχὰς τῶν ἀγαθῶν σπευδούσας* -Basiliensis.

(944) B οὐρανὸν ἁρμονίας. ἅμα δὲ καὶ κάτωθεν αἱ τῶν κολαζομένων ψυχαὶ τηνικαῦτα διὰ τῆς σκιᾶς ὀδυρόμεναι ⟨καὶ⟩[1] ἀλαλάζουσαι προσφέρονται. διὸ καὶ κροτεῖν ἐν ταῖς ἐκλείψεσιν εἰώθασιν οἱ πλεῖστοι χαλκώματα καὶ ψόφον ποιεῖν καὶ πάταγον ἐπὶ τὰς ψυχάς,[2] ἐκφοβεῖ δ' αὐτὰς καὶ τὸ καλούμενον πρόσωπον ὅταν ἐγγὺς γένωνται βλοσυρόν[3] τι καὶ φρικῶδες ὁρώμενον. ἔστι δ' οὐ τοιοῦτον, ἀλλ' ὥσπερ ἡ παρ' ἡμῖν ἔχει γῆ κόλπους βαθεῖς καὶ μεγάλους, ἕνα μὲν ἐνταῦθα διὰ στηλῶν Ἡρακλείων ἀναχεό-
C μενον εἴσω πρὸς ἡμᾶς ἔξω δὲ τὸν Κάσπιον καὶ τοὺς περὶ τὴν Ἐρυθρὰν θάλατταν, οὕτως[4] βάθη ταῦτα τῆς σελήνης ἐστὶ καὶ κοιλώματα. καλοῦσι δ' αὐτῶν τὸ μὲν μέγιστον Ἑκάτης μυχόν, ὅπου καὶ δίκας διδόασιν αἱ ψυχαὶ καὶ λαμβάνουσιν ὧν ἂν ἤδη γεγενημέναι δαίμονες ἢ πάθωσιν ἢ δράσωσι, τὰ δὲ

[1] Basiliensis ; ὀδυρόμεναι, ἀλαλάζουσαι -E, B.
[2] Basiliensis ; φυλάς -E, B.
[3] Stephanus (1624) ; βλοσσυρόν -E, B.
[4] E ; οὕτω -B.

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[a] Plutarch here gives a "mythical correction" of the astronomical calculations in 923 A-B and 932 B *supra* (on the text and the paralogism of this "correction" *cf. Class. Phil.* xlvi [1951], pp. 152-153) and also a mythical explanation of the acceleration of which he had spoken in 933 B *supra*. With this account of the effect of the lunar eclipse upon the disembodied souls *cf. De Genio Socratis*, 591 C and for the harmony in the heavens *cf.* 590 C-D there, *De Musica*, 1147, Plato's *Republic*, 617 B, Aristotle's *De Caelo*, 290 b 12—291 a 28.

[b] *Cf. Aemilius Paulus*, 17 (264 B) ; Pliny, *Nat. Hist.* ii. 12. 9 (54) ; Tacitus, *Annals*, i. 28 ; Juvenal, vi. 442-443. The purpose of the custom is here made to fit the myth ; in

of the harmony of heaven.[a] At the same time too with wails ⟨and⟩ cries the souls of the chastised then approach through the shadow from below. That is why most people have the custom of beating brasses during eclipses and of raising a din and clatter against the souls,[b] which are frightened off also by the so-called face when they get near it, for it has a grim and horrible aspect.[c] It is no such thing, however; but just as our earth contains gulfs that are deep and extensive,[d] one here pouring in towards us through the Pillars of Heracles and outside the Caspian and the Red Sea with its gulfs,[e] so those features are depths and hollows of the moon. The largest of them is called[f] "Hecatê's Recess,"[g] where the souls suffer and exact penalties for whatever they have endured or committed after having already become

De Genio Socratis, 591 C the moon herself flashes and bellows to frighten away the impure souls.

[c] *Cf.* Epigenes in Clement, *Stromat.* v. 49 (=Kern, *Orphicorum Fragmenta*, frag. 33): Γοργόνιον τὴν σελήνην διὰ τὸ ἐν αὐτῇ πρόσωπον. *Cf.* the notion that the face in the moon is that of the Sibyl (*De Pythiae Oraculis*, 398 C-D; *De Sera Numinis Vindicta*, 566 D).

[d] *Cf.* Plato, *Phaedo*, 109 B.

[e] For the Caspian see note *f* on 941 C *supra*. By "Red Sea" Plutarch means what we call the Indian Ocean plus the Persian Gulf and the Red Sea; in *Quaest. Conviv.* 733 B he cites Agatharchidas who wrote an extensive work on the "Red Sea" (*cf.* Photius, *Bibliotheca*, cod. 250 [pp. 441 ff., Bekker]).

[f] *Cf. Class. Phil.* xlvi (1951), p. 151 on 943 E.

[g] For Hecatê and the moon see notes *c* on 937 F and *b* on 942 D *supra*; *cf.* Sophocles, frag. 492 (Nauck²) and Kern, *Orphicorum Fragmenta*, frag. 204. For Hecatê's association with a cave *cf. Homeric Hymn II*, 24-25, and Roscher, *Über Selene und Verwandtes*, pp. 46-48. Plutarch himself associates μυχός with the "punishments in Hades" (*De Superstitione*, 167 A).

(944) δύο μακρά[1] ⟨τὰς Πύλας⟩.[2] περαιοῦνται γὰρ αἱ ψυχαὶ δι' αὐτῶν νῦν μὲν εἰς τὰ πρὸς οὐρανὸν τῆς σελήνης νῦν δὲ πάλιν εἰς τὰ πρὸς γῆν. ὀνομάζεται[3] δὲ τὰ μὲν πρὸς οὐρανὸν τῆς σελήνης Ἠλύσιον πεδίον[4] τὰ δ' ἐνταῦθα Φερσεφόνης οἶκος[5] ἀντίχθονος.

30. Οὐκ ἀεὶ δὲ διατρίβουσιν ἐπ' αὐτῆς[6] οἱ δαίμονες ἀλλὰ χρηστηρίων[7] δεῦρο κατίασιν ἐπιμελη-
D σόμενοι καὶ ταῖς ἀνωτάτω[8] συμπάρεισι καὶ συνοργιάζουσι τῶν τελετῶν κολασταί τε γίγνονται καὶ φύλακες ἀδικημάτων καὶ σωτῆρες ἔν τε πολέμοις καὶ κατὰ θάλατταν ἐπιλάμπουσιν. ὅτι δ' ἂν μὴ καλῶς περὶ ταῦτα πράξωσιν ἀλλ' ὑπ' ὀργῆς[9] ἢ πρὸς ἄδικον χάριν ἢ φθόνῳ δίκην τίνουσιν· ὠθοῦνται γὰρ

[1] Leonicus ; τὰς δὲ δύο μακράς -E, B.
[2] H. C. ; no lacuna indicated in E or B.
[3] H. C. ; ὀνομάζεσθαι -E, B.
[4] B ; παιδίον -E.
[5] After von Arnim (who read οἶκον because he kept ὀνομάζεσθαι *supra*) ; οὐκ -E, B.
[6] Bernardakis (*cf. De Tuenda Sanitate*, 128 B : διατρίβειν ἐπ' ἀκτῆς) ; αὐτὴν -E, B : αὐτῇ -Wyttenbach.
[7] Basiliensis ; χρηστηρίω -E, B.
[8] B ; ἀνωτάταις -E.
[9] -Anon., Aldine, R.J. 94 ; ὑπὲρ γῆς -E, B.

[a] This has been called inconsistent with the preceding statement in chapter 28 that only pure or purified souls attain the moon. Even the pure souls that reach the moon, however, still have the affective soul as well as mind ; and Plutarch has already said in chapter 28 (942 F) that the life which they lead on the moon is οὐ μακάριον οὐδὲ θεῖον.

Spirits [a]; and the two long ones are called ⟨" the Gates "⟩,[b] for through them pass the souls now to the side of the moon that faces heaven and now back to the side that faces earth.[c] The side of the moon towards heaven is named " Elysian plain," [d] the hither side " House of counter-terrestrial Persephonê." [e]

30. Yet not forever do the Spirits tarry upon the moon; they descend hither to take charge of oracles, they attend and participate in the highest of the mystic rituals, they act as warders against misdeeds and chastisers of them, and they flash forth as saviours manifest in war and on the sea.[f] For any act that they perform in these matters not fairly but inspired by wrath or for an unjust end or out of envy they are penalized, for they are cast out upon

[b] *Cf. Class. Phil.* xlvi (1951), p. 153.

[c] They pass to the outer side on their way to the " second death " (944 E ff. *infra*) and to the hither side on their way to rebirth in bodies (945 C *infra*). In *Amatorius*, 766 B the place to which souls come to be reborn in the body is called οἱ Σελήνης καὶ Ἀφροδίτης λειμῶνες.

[d] See 942 F *supra* and note *d* there.

[e] Plutarch uses ἀντίχθων in the usual Pythagorean sense in *De An. Proc. in Timaeo*, 1028 B (*cf. De Placitis*, 891 F, 895 C, 895 E=Aëtius, ii. 29. 4; iii. 9. 2; iii. 11. 3). Identification of the moon with the counter-earth is ascribed to certain " Pythagoreans " (but *cf.* Cherniss, *Aristotle's Criticism of Plato and the Academy*, i, p. 562) by Simplicius, *De Caelo*, p. 512. 17-20 (*cf.* Asclepius, *Metaph.* p. 35. 24-27; *Scholia in Aristotelem*, 505 A 1 [Brandis]).

[f] *Cf. De Defectu Oraculorum*, 417 A-B and *De Genio Socratis*, 591 C; R. M. Jones, *The Platonism of Plutarch*, pp. 29, 59, and 55-56. Iamblichus, *Vit. Pyth.* vi. 30 (p. 18. 4 [Deubner]) says that some people considered Pythagoras to be such a Spirit from the moon. In the last clause of the sentence above Plutarch refers to the Dioscuri: *cf. Lysander*, 14 (439 C); *De Defectu Oraculorum*, 426 C.

(944) αὖθις ἐπὶ γῆν συνειργνύμενοι[1] σώμασιν ἀνθρωπίνοις. ἐκ δὲ τῶν βελτιόνων ἐκείνων οἵ τε περὶ τὸν Κρόνον ὄντες ἔφασαν αὐτοὺς[2] εἶναι καὶ πρότερον ἐν τῇ Κρήτῃ τοὺς Ἰδαίους[3] Δακτύλους ἔν τε
E Φρυγίᾳ τοὺς Κορύβαντας γενέσθαι καὶ τοὺς περὶ Βοιωτίαν ἐν Οὐδώρᾳ[4] Τροφωνιάδας καὶ μυρίους ἄλλους πολλαχόθι τῆς οἰκουμένης ὧν ἱερὰ καὶ τιμαὶ καὶ προσηγορίαι διαμένουσιν αἱ δὲ δυνάμεις ἔνευον[5] εἰς ἕτερον τόπον τῆς ἀρίστης ἐξαλλαγῆς τυγχανόντων. τυγχάνουσι δ' οἱ μὲν πρότερον οἱ δ' ὕστερον, ὅταν ὁ νοῦς ἀποκριθῇ τῆς ψυχῆς. ἀποκρίνεται δ' ἔρωτι τῆς περὶ τὸν ἥλιον εἰκόνος, δι' ἧς ἐπιλάμπει τὸ ἐφετὸν καὶ καλὸν καὶ θεῖον καὶ μακάριον οὗ πᾶσα φύσις, ἄλλη δ' ἄλλως, ὀρέγεται. καὶ γὰρ αὐτὴν τὴν σελήνην ἔρωτι τοῦ ἡλίου περιπολεῖν δεῖ[6]

[1] -Anon., Aldine, R.J. 94 : συρρηγνύμενοι -E, B.
[2] Bernardakis (implied in the versions of Xylander and Kepler) ; αὐτοὺς -E, B.
[3] Aldine, Basiliensis ; ἰδίους -E, B.
[4] E, B ; οὐδώσᾳ -Aldine ; Λεβαδίᾳ -Basiliensis.
[5] Apelt ; ἐνίων -E, B.
[6] Apelt ; περιπεριπολεῖν ἀεὶ -E ; περιπολεῖν ἀεὶ -B.

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[a] *Cf.* 926 c *supra* (ἡ ψυχὴ . . . τῷ σώματι συνεῖρκται), *De An. Proc. in Timaeo*, 1023 c (τῷ σώματι συνειργμένη *scil.* ἡ ψυχή) ; for the "misbehaviour" of Spirits *cf. De Defectu Oraculorum*, 417 B, 417 E-F, *De Iside*, 361 A ff., where the punishment of these Spirits is mentioned in 361 c (*cf. De Defectu Oraculorum*, 415 c).

[b] *i.e. not* those who for misdeeds are cast out upon earth again. The attendants of Cronus are the δαίμονες of 942 A *supra*. *Cf.* Porphyry's account of good and evil spirits in *De Abstinentia*, ii. 38-39.

[c] *Cf. Numa*, 15 (70 C-D) ; [Plutarch], *De Fluviis*, xiii. 3 (vii, p. 305. 4-12 [Bernardakis]) ; Strabo, x. 3. 22 (c. 473) ; Pausanias, v. 7. 6-10 ; Diodorus, v. 64. 3-7.

earth again confined in human bodies.[a] To the former class of better Spirits [b] the attendants of Cronos said that they belong themselves as did aforetime the Idaean Dactyls [c] in Crete and the Corybants [d] in Phrygia as well as the Boeotian Trophoniads in Udora [e] and thousands of others in many parts of the world whose rites, honours, and titles persist but whose powers tended to another place as they achieved the ultimate alteration. They achieve it, some sooner and some later, once the mind has been separated from the soul.[f] It is separated by love for the image in the sun through which shines forth manifest the desirable and fair and divine and blessed towards which all nature in one way or another yearns,[g] for it must be out of love for the sun that the moon herself goes her rounds and gets into con-

[d] *Cf.* Schwenn, *R.E.* xi. 2 (1922), 1441-1446, and Lobeck, *Aglaophamos*, pp. 1139-1155.

[e] This place seems to be mentioned nowhere else; but, since Plutarch here refers to inactive oracles from which the Spirits have departed, the change to Λεβαδείᾳ cannot be right, for in *De Defectu Oraculorum*, 411 E-F Lebadeia is said to be the only remaining *active* oracle in Boeotia where there are many others now silent or even deserted.

[f] *Cf.* 943 B *supra*.

[g] Plato's *Republic*, 507-509 is Plutarch's main inspiration. It is a passage which he echoes or cites many times (*e.g. De Iside*, 372 A, *De E*, 393 D, *De Defectu Oraculorum*, 413 C and 433 D-E, *Ad Principem Inerud.* 780 F and 781 F, *Plat. Quaest.* 1006 F—1007 A); and his references to it show that "the image in the sun," τῆς περὶ τὸν ἥλιον εἰκόνος, here means the visible likeness of the good which the sun manifests and not, as Kepler suggests, the reflection of the sun seen in the moon as in a mirror. The last part of the sentence with the notion that all nature strives towards the good and the term ἐφετόν itself are drawn from Aristotle (*Physics*, 192 a 16-19 and the whole of *Physics* Α, 9 and *Metaphysics* Λ, 7); *cf. De Iside*, 372 E-F and *Amatorius*, 770 B.

(944) καὶ συγγίγνεσθαι ὀρεγομένην ἀπ' αὐτοῦ τὸ γονιμώτατον ⟨δέχεσθαι⟩.[1] λείπεται δ' ἡ τῆς ψυχῆς
F φύσις ἐπὶ τῆς σελήνης[2] οἷον ἴχνη τινὰ βίου καὶ ὀνείρατα διαφυλάττουσα, καὶ περὶ ταύτης ὀρθῶς ἡγοῦ λελέχθαι τὸ

ψυχὴ δ' ἠύτ' ὄνειρος ἀποπταμένη πεπότηται.

οὐδὲ γὰρ εὐθὺς οὐδὲ τοῦ σώματος ἀπαλλαγεῖσα τοῦτο πέπονθεν ἀλλ' ὕστερον ὅταν ἔρημος καὶ μόνη τοῦ νοῦ ἀπαλλαττομένη γένηται. καὶ Ὅμηρος ὧν εἶπε πάντων μάλιστα δὴ κατὰ θεὸν εἰπεῖν ἔοικε περὶ τῶν καθ' Ἅιδου[3]

τὸν δὲ μετ' εἰσενόησα βίην Ἡρακληείην,[4]
εἴδωλον· αὐτὸς δὲ μετ' ἀθανάτοισι θεοῖσιν.

αὐτός τε γὰρ ἕκαστος ἡμῶν οὐ θυμός[5] ἐστιν οὐδὲ φόβος οὐδ' ἐπιθυμία καθάπερ οὐδὲ σάρκες οὐδ'
945 ὑγρότητες ἀλλ' ᾧ[6] διανοούμεθα καὶ φρονοῦμεν, ἡ

[1] Wyttenbach (*cf.* 945 c *infra*: ἡ σελήνη . . . δεχομένη . . . and 929 c *supra*: δέχεται τὸν ἥλιον); no lacuna -E, B.
[2] H. C. (*cf.* 944 B-C *supra*); τὴν σελήνην -E, B; τῇ σελήνῃ -Wyttenbach.
[3] Kaltwasser and Wyttenbach after Amyot's version; καθόλου -E, B.
[4] MSS. of Homer and editors; ἠρακλείην -E, B.
[5] -Anon., Aldine, R.J. 94; εὔθυμός -E, B, Basiliensis.
[6] Leonicus; ὃ -E, B.

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[a] The specific nature of this fertilization is described in 945 c *infra*: the conception of the sun as an image of god is connected with a reference to its fructifying force in *De E*, 393 D. For sexual language used of the moon and sun see the references in note *a* on 929 c *supra*.

[b] *Odyssey*, xi. 222.

[c] *Odyssey*, xi. 601-602. Similar interpretations of this

junction with him in her yearning ⟨to receive⟩ from him what is most fructifying.[a] The substance of the soul is left upon the moon and retains certain vestiges and dreams of life as it were ; it is this that you must properly take to be the subject of the statement

> Soul like a dream has taken wing and sped,[b]

for it is not straightway nor once it has been released from the body that it reaches this state but later when, divorced from the mind, it is deserted and alone. Above all else that Homer said his words concerning those in Hades appear to have been divinely inspired

> Thereafter marked I mighty Heracles—
> His shade ; but he is with the deathless gods. . . .[c]

In fact the self of each of us is not anger or fear or desire just as it is not bits of flesh or fluids either but is that with which we reason and understand [d] ; and

passage are common among the Neo-Pythagoreans and Neo-Platonists : *cf.* especially [Plutarch], *De Vita et Poesi Homeri*, chap. 123 ; Plotinus, *Enn.* i. 1. 12 ; iv. 3. 27 and 32 ; vi. 4. 16 ; Proclus, *In Rem Publicam*, i, p. 120. 22 ff. and p. 172. 9 ff. (Kroll) ; Cumont, *Rev. de Philologie*, xliv (1920), pp. 237-240, who contends that the doctrine itself arose in Alexandria where Aristarchus became acquainted with it.

[d] *Cf. De Sera Numinis Vindicta*, 564 c and *Adv. Colotem*, 1119 A. For the νοῦς as the true self *cf.* Aristotle, *Eth. Nic.* 1166 a 16-17 and 22-23, 1168 b 35, 1169 a 2, 1178 a 2-7. Plato usually speaks of the ψυχή without further qualification as the true self (*e.g. Laws*, 959 A, *Phaedo*, 115 C [*cf.* the Pseudo-Platonic *Alcibiades I*, 130 A-C and *Axiochus*, 365 E]), although such passages as *Republic*, 430 E—431 A, 588 C—589 B, 611 C-E can be taken to imply that he meant the *rational* soul only (*cf.* Plotinus's use of the last passage in *Enn.* i. 1. 12). *Cf.* also Cicero, *De Republica*, vi. 26 (" mens cuiusque is est quisque ") and Marcus Aurelius, ii. 2 with Farquharson's note *ad loc.*

(945) τε ψυχὴ τυπουμένη μὲν ὑπὸ τοῦ νοῦ τυποῦσα δὲ τὸ σῶμα καὶ περιπτύσσουσα[1] πανταχόθεν ἐκμάττεται τὸ εἶδος ὥστε κἂν πολὺν χρόνον χωρὶς ἑκατέρου γένηται[2] διατηροῦσα τὴν ὁμοιότητα καὶ τὸν τύπον[3] εἴδωλον ὀρθῶς ὀνομάζεται. τούτων δ' ἡ σελήνη, καθάπερ εἴρηται, στοιχεῖόν ἐστιν· ἀναλύονται γὰρ εἰς ταύτην ὥσπερ εἰς τὴν γῆν τὰ σώματα τῶν νεκρῶν, ταχὺ μὲν αἱ σώφρονες μετὰ σχολῆς ἀπράγμονα καὶ φιλόσοφον στέρξασαι βίον (ἀφεθεῖσαι γὰρ ὑπὸ τοῦ νοῦ καὶ πρὸς οὐδὲν ἔτι χρώμεναι τοῖς πάθεσιν ἀπομαραίνονται). τῶν δὲ φιλοτίμων
B καὶ πρακτικῶν ἐρωτικῶν τε περὶ σώματα καὶ θυμοειδῶν αἱ μὲν οἷον ἐν ὕπνῳ ταῖς τοῦ βίου μνημοσύναις ὀνείρασι χρώμεναι διαφέρονται καθάπερ ἡ τοῦ Ἐνδυμίωνος. ἐπεὶ δ' αὐτὰς τὸ ἄστατον καὶ τὸ ἐμπαθὲς[4] ἐξίστησι καὶ ἀφέλκει τῆς σελήνης πρὸς

[1] E; περιπτύσσου -B.
[2] B; . . . χωρὶς ἑκατέρου γένηται πολὺν χρόνον -E.
[3] -Anon., Aldine, R.J. 94; τόπον -E, B.
[4] Kepler, Wyttenbach after Amyot's version; ἀπαθὲς -E, B.

[a] *Cf. De Sera Numinis Vindicta*, 564 A, where the souls are described as τύπον ἐχούσας ἀνθρωποειδῆ, and [Plutarch], *De Vita et Poesi Homeri*, chap. 123 (εἴδωλον ὅπερ ἦν ἀποπεπλασμένον [?] τοῦ σώματος); Porphyry in Stobaeus, I. xlix. 55 (=i, p. 429. 16-22 [Wachsmuth]). The notion that the soul after death retains the appearance of the body was common (*cf.* Lucian, *Vera Hist.* ii. 12), although Alexander Polyhistor in Diogenes Laertius, viii. 31 gave it as Pythagorean doctrine (but *cf.* Antisthenes, frag. 33 [Mullach]). With the special point of the present passage that the body is given its form by the imprint of the soul, which has itself been moulded by the mind, *cf.* Proclus, *In Rem Publicam*, ii, pp. 327. 21–328. 15 (Kroll); Plotinus, iv. 3. 9. 20-23 and 10. 35-42; Macrobius, *Somn. Scip.* I. xiv. 8; Sextus, *P.H.* i. 85. In *Laws*, 959 A-B Plato calls the body "an attendant semblance of the self" and uses the word εἴδωλα of corpses.

the soul receives the impression of its shape through being moulded by the mind and moulding in turn and enfolding the body on all sides, so that, even if it be separated from either one for a long time, since it preserves the likeness and the imprint it is correctly called an image.[a] Of these, as has been said,[b] the moon is the element, for they are resolved into it [c] as the bodies of the dead are resolved into earth. This happens quickly to the temperate souls who had been fond of a leisurely, unmeddlesome, and philosophical life, for abandoned by the mind and no longer exercising the passions for anything they wither quietly away. Of the ambitious and the active, the irascible and those who are enamoured of the body, however, some pass their time [d] as it were in sleep with the memories of their lives for dreams as did the soul of Endymion [e]; but, when they are excited by restlessness and emotion and drawn away from the moon to another birth, she

The notion that soul encompasses body instead of being contained by it comes ultimately from Plato, *Timaeus*, 34 B.

[b] *i.e.* 943 A *supra*.

[c] For later Neo-Platonic opinions concerning the dissolution of the lower soul see Proclus, *In Timaeum*, iii, p. 234. 9 ff. (Diehl) and *cf.* Plotinus, *Enn.* iv. 7. 14 (. . . ἀφειμένον δὲ τὸ χεῖρον οὐδὲ αὐτὸ ἀπολεῖσθαι ἕως ἂν ᾖ ὅθεν ἔχει τὴν ἀρχήν).

[d] The expression correlative to αἱ μέν is ἐπεὶ δ' αὐτάς, and the contrast between ἐπεὶ δ' αὐτὰς . . . ἐξίστησι and the present clause requires that διαφέρονται mean "pass their time" rather than "toss about," "be distraught," the meaning that it has in *De Genio Socratis*, 591 D.

[e] There seems to be no other reference to Endymion's dreams; but Plutarch may here have been influenced by the story that Endymion's endless sleep was a punishment for his passion for Hera (*cf. Scholia in Apollonium Rhodium Vetera*, iv. 57-58 [p. 265, Wendel]) and *Scholia in Theocritum Vetera*, iii. 49-51 b [p. 133, Wendel]).

(945) ἄλλην γένεσιν, οὐκ ἐᾷ ⟨νεύειν ἐπὶ γῆν⟩[1] ἀλλ' ἀνακαλεῖται καὶ καταθέλγει.[2] μικρὸν γὰρ οὐδὲν οὐδ' ἥσυχον οὐδ' ὁμολογούμενον ἔργον ἐστὶν ὅταν ἄνευ νοῦ τῷ παθητικῷ σώματος ἐπιλάβωνται. Τιτυοὶ δὲ καὶ Τυφῶνες ὅ τε Δελφοὺς κατασχὼν καὶ συνταράξας τὸ χρηστήριον ὕβρει καὶ βίᾳ Πύθων[3] ἐξ ἐκείνων ἄρα τῶν ψυχῶν ἦσαν, ἐρήμων λόγου[4] καὶ τύφῳ πλανηθέντι τῷ παθητικῷ χρησαμένων, χρόνῳ δὲ κἀκείνας κατεδέξατο[5] εἰς αὑτὴν[6] ἡ σελήνη καὶ
C κατεκόσμησεν. εἶτα τὸν νοῦν αὖθις ἐπισπείραντος τοῦ ἡλίου τῷ ζωτικῷ δεχομένη νέας ποιεῖ ψυχάς, ἡ δὲ γῆ τρίτον σῶμα παρέσχεν. οὐδὲν γὰρ αὕτη δίδωσι μετὰ θάνατον ὅσα λαμβάνει πρὸς γένεσιν ⟨ἀποδιδοῦσα,⟩[7] ἥλιος δὲ λαμβάνει μὲν οὐδὲν ἀπο-

[1] H. C. (*cf. De Sera Numinis Vindicta*, 566 A; Frag VI. 2 [VII, p. 22. 9, Bernardakis]); οὐκ ἐᾷ vac. 12-E, 9-B.
[2] E, B²; ἀναθέλγει -B¹.
[3] Kaltwasser (*cf.* Introduction, note *b*, p. 12 *supra*): Τυφὼν -E, B.
[4] Kaltwasser (implied by Kepler's version); ἔρημοι λόγῳ -E, B.
[5] Leonicus; κατέδειξεν -E, B.
[6] B²; αὐτὴν -E, B¹.
[7] H. C.; no lacuna indicated in E or B; δίδωσιν ⟨τοῖς ἄλλοις δυσί, ἀλλ' ἀποδίδωσι⟩ μετὰ θάνατον κτλ. -Wyttenbach.

[a] *Cf. De Sera Numinis Vindicta*, 565 D-E, 566 A: Plato, *Phaedo*, 81 B-E, 108 A-B.
[b] *Cf. Odyssey*, xi. 576-581; Pindar, *Pythian*, iv. 90; Eustathius, *Comment. ad Odysseam*, 1581. 54 ff.
[c] *Cf.* especially *De Iside*, chaps. 27 and 30.
[d] Πύθων and Τιτυός are named together by Plutarch in *Pelopidas*, 16 (286 C); *cf.* Strabo, ix. 3. 12 (cc. 422-423) and Apollodorus, *Bibliotheca*, i. 4. 1. 3-5 (22-23).
[e] For the play on Τυφών-τῦφος *cf.* Plato, *Phaedrus*, 230 A,

forbids them ⟨to sink towards earth⟩ [a] and keeps conjuring them back and binding them with charms, for it is no slight, quiet, or harmonious business when with the affective faculty apart from reason they seize upon a body. Creatures like Tityus [b] and Typho [c] and the Python [d] that with insolence and violence occupied Delphi and confounded the oracle belonged to this class of souls, void of reason and subject to the affective element gone astray through delusion [e]; but even these in time the moon took back to herself and reduced to order. Then when the sun with his vital force has again sowed mind in her she receives it and produces new souls, and earth in the third place furnishes body.[f] In fact, the earth gives nothing ⟨in giving back⟩ after death all that she takes for generation, and the sun takes nothing but takes back the

which is quoted by Plutarch in *Adv. Coloten*, 1119 B; and *cf.* also Marcus Aurelius, ii. 17 (. . . τὰ δὲ τῆς ψυχῆς ὄνειρος καὶ τῦφος . . .).

[f] *Cf.* 943 A and 944 E-F *supra*. In the latter passage ὀρεγομένην ἀπ' αὐτοῦ τὸ γονιμώτατον ⟨δέχεσθαι⟩ (*cf. De E*, 393 D [τὸ περὶ αὐτὴν γόνιμον] and *Aqua an Ignis*, 958 E [τοῦ πυρὸς . . . οἷον τὸ ζωτικὸν ἐνεργαζομένου]) shows that τῷ ζωτικῷ here is to be construed with the preceding words rather than with those that follow (so Reinhardt, *Kosmos und Sympathie*, pp. 320, 329). On Reinhardt's treatment of this passage in general and his attempt to derive it from Posidonius (*op. cit.* pp. 329 ff.) *cf.* R. M. Jones, *Class. Phil.* xxvii (1932), pp. 118-120, 129-131, 134-135; *n.b. Timaeus*, 41-42 where the demiurge is said to have sowed (ἔσπειρεν) in the earth, the moon, and the other planets the souls that he had fashioned himself, *i.e.* the minds (*cf.* 41 E, 42 D), and the interpretation of Timaeus Locrus, 99 D-E, according to which this means that the souls are brought to earth from the various planets (*cf.* also R. M. Jones, *The Platonism of Plutarch*, pp. 49-51, and especially Porphyry in Proclus, *In Timaeum*, i, p. 147. 6-13 [*n.b.* . . . εἰς τὸ τῆς σελήνης σῶμα σπείρεσθαί φησιν . . .] and p. 165. 16-23 [Diehl]).

(945) λαμβάνει δὲ τὸν νοῦν διδούς, σελήνη δὲ καὶ λαμβάνει καὶ δίδωσι καὶ συντίθησι καὶ διαιρεῖ [καὶ][1] κατ' ἄλλην καὶ ἄλλην δύναμιν, ὧν Εἰλείθυια[2] μὲν ᾗ συντίθησιν Ἄρτεμις δ' ᾗ διαιρεῖ καλεῖται. καὶ τριῶν Μοιρῶν ἡ μὲν Ἄτροπος περὶ τὸν ἥλιον ἱδρυμένη τὴν ἀρχὴν ἐνδίδωσι τῆς γενέσεως, ἡ δὲ Κλωθὼ περὶ τὴν σελήνην φερομένη συνδεῖ καὶ μίγνυσιν, ἐσχάτη δὲ συνεφάπτεται περὶ γῆν ἡ Λάχεσις ᾗ πλεῖστον τύχης μέτεστι. τὸ γὰρ ἄψυχον ἄκυρον αὐτὸ καὶ παθητὸν ὑπ' ἄλλων, ὁ δὲ νοῦς ἀπαθὴς καὶ αὐτο-
D κράτωρ, μικτὸν δὲ καὶ μέσον ἡ ψυχὴ καθάπερ ἡ σελήνη τῶν ἄνω καὶ κάτω σύμμιγμα καὶ μετακέρασμα[3] ὑπὸ τοῦ θεοῦ γέγονε, τοῦτον ἄρα πρὸς ἥλιον ἔχουσα τὸν λόγον ὃν ἔχει γῆ πρὸς σελήνην.'

[1] καὶ -E, B : omitted by Basiliensis.
[2] E : εἰλήθυια -B.
[3] Wyttenbach after the versions of Xylander and Amyot ; μέγα κέρας -E, B.

[a] *Cf. Quaest. Conviv.* 658 F : ὅθεν οἶμαι καὶ τὴν Ἄρτεμιν Λοχείαν καὶ Εἰλείθυιαν, οὐκ οὖσαν ἑτέραν ἢ τὴν σελήνην, ὠνομάσθαι. Here, however, Artemis and Ilithyia are supposed to be names for two contrary faculties of the moon. In 938 F *supra* the identification of the moon with Artemis because she is " sterile but is helpful and beneficial to other females " implies that Artemis *is* Ilithyia, as she is in Plato's *Theaetetus*, 149 B (*cf.* Cornutus, p. 73, 7-18 [Lang]). Artemis was associated with easy, painless death, however (*cf. Odyssey*, xi. 172-173 ; xviii. 202) ; and Plutarch probably connects this notion with the gentleness of the death on the moon (*cf.* 943 B *supra*). L. A. Post has suggested that he may also have

mind that he gives, whereas the moon both takes and gives and joins together and divides asunder in virtue of her different powers, of which the one that joins together is called Ilithyia and that which divides asunder Artemis.[a] Of the three Fates too Atropos enthroned in the sun initiates generation, Clotho in motion on the moon mingles and binds together, and finally upon the earth Lachesis too puts her hand to the task, she who has the largest share in chance.[b] For the inanimate is itself powerless and susceptible to alien agents, and the mind is impassible and sovereign ; but the soul is a mixed and intermediate thing, even as the moon has been created by god a compound and blend of the things above and below and therefore stands to the sun in the relation of earth to moon.'

intended ἀρταμεῖν as an etymology of Ἄρτεμις. Ilithyia and Artemis are sometimes sisters (*cf.* Diodorus Siculus, v. 72. 5), but then they have the same function.

[b] In *De Genio Socratis*, 591 B Atropos is situated in the invisible, Clotho in the sun, and Lachesis in the moon. The *order* there is the same as it is here and different from that in the *De Fato* (568 E), where in interpretation of *Republic*, 617 C Clotho is highest, Lachesis lowest, and Atropos intermediate. Both orders differ from that of Xenocrates (frag. 5 [Heinze]), which was Atropos (intelligible and supracelestial), Lachesis (opinable and celestial), Clotho (sensible and sublunar). The order of *De Facie* and *De Genio Socratis* is that of Plato's *Laws*, 960 C, where Lachesis, Clotho, and Atropos are named in *ascending* order as the epithet of Atropos, Τρίτη σώτειρα, shows; here in the *De Facie* it is the passage of the *Republic*, however, that Plutarch has in mind, for his συνεφάπτεται is an echo of Plato's ἐφαπτομένην and ἐφάπτεσθαι there. *Cf.* H. Dörrie, *Hermes*, lxxxii (1954), pp. 331-342 (especially pp. 337-339), who discusses the relation of these passages to the pre-history of the Neoplatonic doctrine of hypostases and argues that in writing them Plutarch was inspired by Xenocrates.

(945) Ταῦτ' " εἶπεν ὁ Σύλλας " ἐγὼ μὲν ἤκουσα τοῦ ξένου διεξιόντος ἐκείνῳ δ' οἱ τοῦ Κρόνου κατευνασταὶ καὶ θεράποντες, ὡς ἔλεγεν αὐτός, ἐξήγγειλαν. ὑμῖν δ', ὦ Λαμπρία, χρῆσθαι τῷ λόγῳ πάρεστιν ᾗ βούλεσθε."

This," said Sulla, "I heard the stranger relate; and he had the account, as he said himself, from the chamberlains and servitors of Cronus. You and your companions, Lamprias, may make what you will of the tale." [a]

[a] *Cf. De Sera Numinis Vindicta*, 561 B, *De Genio Socratis*, 589 F; Plato's *Phaedo*, 114 D, *Meno*, 86 B, *Gorgias*, 527 A, *Phaedrus*, 246 A.

ON THE PRINCIPLE OF COLD

(DE PRIMO FRIGIDO)

INTRODUCTION

This little essay, or open letter to Favorinus, is not written in a controversial spirit, though a few sharp comments are made from time to time. Having established (chapters 5-7) that an element of Cold really exists, Plutarch proceeds to consider what that element may be. Since fire is obviously excluded, can it be air, as the Stoics believe (8-12), or water, as Empedocles, and an early Peripatetic, Strato, hold (13-16)? Or, indeed, may it be earth itself (17-22)? This latter opinion is apparently put forward by Plutarch as an original contribution to theoretical physics and there is no reason to believe it is not his. The essay closes, however, with a recommendation to scepticism,[a] so that our author may not have regarded his attempted proof as cogent, as indeed it is not.

The work was probably written in Delphi (*cf.* 953 c-d and e) after a.d. 107 (949 e, note) and addressed to the young philosopher Favorinus,[b] the great lover of Aristotle (*Mor.* 734 f), who is also a speaker in *Symposiacs*, viii. 10. Though Favorinus was in all

[a] See J. Schröter, *Plutarchs Stellung zur Skepsis* (Greifswald, 1911), pp. 23 and 40. He compares other recommendations to the suspension of judgement, such as *Mor.* 430 f—431 a. *Cf.* also Hartman, *De Plutarcho*, pp. 253 f.

[b] For the details see Ziegler's article on Plutarch in Pauly-Wissowa, *RE*, col. 675.

likelihood some twenty years younger than Plutarch, the two men dedicated several works to each other.[a] In the present essay it is, perhaps, odd that of the three quotations from Aristotle one is a rebuke (950 B), one is apparently a partial miscitation (948 A, note), while the third is of no importance. No doubt it is in virtue of Favorinus' youth that his idol is treated so lightly, and that the sceptical note is sounded so firmly at the end. The young Peripatetic was also quoted by Plutarch (for partial refutation) in *Mor.* 271 C; but Plutarch (if Tarn[b] and others are right) became much more favourable to Peripatetics later in his life (*e.g.* in the *Life of Alexander*).

Bernardakis's text of this work is one of his most unsatisfactory; even for an *editio minor* it is careless and confused to a deplorable extent. Nor are the means of correcting and supplementing it at hand, the fifth Teubner volume being still, one fears, in the remote future. Then, too, the only photographs available were those of E and B, which are not likely to add much to our knowledge.[c] Consequently the only course that seemed prudent was to return to

[a] Lamprias cat. 132: Plutarch's *Letter to Favorinus on Friendship* (or *The Use of Friends*); Galen, *de Opt. Doctr.* (i. 41 K): Favorinus's *Plutarch, or On the Academic Disposition.* See also Suidas, *s.v.* Φαβωρῖνος.

[b] *Alexander the Great*, ii. 298 f.

[c] See the recent brisk controversy as to their relationship: Manton, *Class. Quart.* xliii (1949), pp. 97-104; Hubert, *Rhein. Mus.* xciii (1950), pp. 330-336; Einarson and De Lacy, *Class. Phil.* xlvi (1951), p. 110, n. 56; Flacelière, ed. Plutarch, *Amatorius*, pp. 35 ff. The evidence in this essay, for what it may be worth, seems to make it unlikely that B was here copied from either E or an immediate descendant; they both appear to go back to a common ancestor, perhaps through several intermediaries: see, *e.g.*, 951 A, B, D, 953 E. See now Cherniss *supra*, pp. 27, note *a*; 31, 32.

Wyttenbach wherever there was a reasonable doubt. Bernardakis has been tacitly corrected (or altered, whichever it may be) in a good many places. This has been done consistently when both E and B agree with Wyttenbach's and Hutten's silence; Bernardakis's silence, unfortunately, appears to have no significance.

The work is no. 90 in the catalogue of Lamprias.

(945) # ΠΕΡΙ ΤΟΥ ΠΡΩΤΩΣ[1] ΨΥΧΡΟΥ

F 1. Ἔστι τις ἄρα τοῦ ψυχροῦ δύναμις, ὦ Φαβωρῖνε, πρώτη καὶ οὐσία, καθάπερ τοῦ θερμοῦ τὸ πῦρ, ἧς παρουσίᾳ τινὶ καὶ μετοχῇ γίνεται τῶν ἄλλων ἕκαστον ψυχρόν· ἢ μᾶλλον ἡ ψυχρότης στέρησίς ἐστι θερμότητος, ὥσπερ τοῦ φωτὸς τὸ σκότος λέγουσι καὶ τῆς κινήσεως τὴν στάσιν; ἐπεὶ καὶ τὸ ψυχρὸν ἔοικε στάσιμον εἶναι, κινητικὸν δὲ τὸ
946 θερμόν· αἵ τε τῶν θερμῶν καταψύξεις οὐδεμιᾶς παρουσίᾳ γίνονται δυνάμεως, ἀλλ' ἐκστάσει θερμότητος· ἅμα γὰρ ἀπιοῦσ' ὅλη[2] φαίνεται καὶ ψύχεται τὸ ὑπολειπόμενον· ὁ γὰρ ἀτμός, ὃν τὰ ζέοντα τῶν ὑδάτων μεθίησιν, ἀπιόντι τῷ θερμῷ συνεκπίπτει· διὸ καὶ μειοῖ τὸ πλῆθος ἡ περίψυξις ἐκκρίνουσα τὸ θερμόν, ἑτέρου μηδενὸς ἐπεισιόντος.

2. Ἦ πρῶτον μὲν ἄν τις ὑπίδοιτο τοῦ λόγου τούτου τὸ πολλὰς τῶν ἐμφανῶν ἀναιρεῖν δυνάμεων, ὡς οὐ ποιότητας οὐδ' ἕξεις, ἕξεων δὲ καὶ ποιοτήτων στερήσεις οὔσας,[3] βαρύτητα μὲν κουφότητος καὶ σκληρότητα μαλακότητος, τὸ μέλαν δὲ τοῦ λευκοῦ
B καὶ τὸ πικρὸν τοῦ γλυκέος, καὶ ὧν ἕκαστον ἑκάστῳ πέφυκεν ἀντικεῖσθαι κατὰ δύναμιν, οὐχ ὡς ἕξει στέρησις· ἔπειθ' ὅτι πᾶσα στέρησις ἀργόν ἐστι καὶ

[1] πρώτως Meziriacus : πρώτου.
[2] ὅλη Meziriacus : πολλή : Wyttenbach writes ἅμα γὰρ ἀπιούσῃ πολλῇ.
[3] οὔσας added by Hartman.

ON THE PRINCIPLE OF COLD

1. Is there, then, Favorinus,[a] an active principle or substance of Cold (as fire is of Heat) through the presence of which and through participation in which everything else becomes cold? Or is coldness rather a negation of warmth, as they say darkness is of light and rest of motion? Cold, indeed, seems to have the quality of being stationary, as heat has that of motion; while the cooling off of hot things is not caused by the presence of any force,[b] but merely by the displacement of heat, for it can be seen to depart completely at the same time as the remainder cools off. The steam, for example, which boiling water emits, is expelled in company with the departing heat; that is why the amount becomes less by cooling off; for this removes the heat and nothing else takes its place.

2. First of all, must we not be wary of one point in this argument? It eliminates many obvious forces by considering them not to be qualities or properties, but merely the negation of qualities or properties, weight being the negation of lightness and hardness that of softness, black that of white, and bitter that of sweet, and so in any other case where there is a natural opposition of forces rather than a relation of positive and negative. Another point is that all negation is inert and unproductive: blindness, for

[a] See the introduction to this essay.
[b] As, for instance, the force of fire.

(946) ἄπρακτον, ὡς τυφλότης καὶ κωφότης καὶ σιωπὴ καὶ θάνατος; ἐκστάσεις γάρ εἰσιν εἰδῶν καὶ ἀναιρέσεις οὐσιῶν, οὐ φύσεις τινὲς οὐδ' οὐσίαι καθ' ἑαυτάς· ἡ δὲ ψυχρότης οὐκ ἐλάττονα τῆς θερμότητος ἐγγινομένη τοῖς σώμασι πάθη καὶ μεταβολὰς ἐνεργάζεσθαι πέφυκε· καὶ γὰρ πήγνυται πολλὰ τῷ ψυχρῷ καὶ συγκρίνεται καὶ πυκνοῦται· καὶ τὸ στά-
C σιμον αὐτῷ καὶ δυσκίνητον οὐκ ἀργόν ἐστιν, ἀλλ' ἐμβριθὲς καὶ βέβαιον, ὑπὸ ῥώμης συνερειστικὸν καὶ συνεκτικὸν ἐχούσης τόνον. ὅθεν ἡ μὲν στέρησις ἔκλειψις γίνεται καὶ ὑποχώρησις τῆς ἀντικειμένης δυνάμεως, ψύχεται δὲ πολλὰ πολλῆς αὐτοῖς θερμότητος ἐνυπαρχούσης· ἔνια δὲ καὶ μᾶλλον ἡ ψυχρότης, ἂν λάβῃ θερμότερα, πήγνυσι καὶ συνάγει, καθάπερ τὸν βαπτόμενον σίδηρον· οἱ δὲ Στωικοὶ καὶ τὸ πνεῦμα λέγουσιν ἐν τοῖς σώμασι τῶν βρεφῶν τῇ περιψύξει στομοῦσθαι καὶ μεταβάλλον ἐκ φύσεως[1] γίνεσθαι ψυχήν· ἀλλὰ τοῦτο μὲν ἀμφισβητήσιμον, ἑτέρων δὲ πολλῶν τὴν ψυχρότητα φαινομένην δημιουργὸν οὐκ ἄξιον ἡγεῖσθαι στέρησιν.

D 3. Ἔτι στέρησις μὲν οὐδεμία δέχεται τὸ μᾶλλον καὶ τὸ ἧττον, οὐδ' ἂν εἴποι τις ἕτερον ἑτέρου μᾶλλον πεπηρῶσθαι τῶν μὴ βλεπόντων ἢ σιωπᾶν τῶν μὴ φθεγγομένων ἢ τεθνάναι τῶν μὴ ζώντων. ἐν δὲ τοῖς ψυχροῖς πολὺ τὸ μᾶλλον καὶ τὸ ἧττον ἔνεστι καὶ τὸ λίαν καὶ τὸ μὴ λίαν καὶ ὅλως ἐπιτάσεις καὶ

[1] φύσεως] ψύξεως van Herwerden from *Mor.* 1052 F.

[a] As steam is condensed and oil becomes viscous.
[b] The verb is ambiguous: "become cold" or "dry" or perhaps "congealed."

example, and deafness, silence or death. Here you have the defection of a definite form and the annihilation of a reality, not something that is in itself a part of nature or reality. It is the nature of coldness, however, to produce affects and alterations in bodies that it enters no less than those caused by heat. Many objects can be frozen solid, or become condensed or made viscous, by cold.[a] Moreover, the property whereby coldness promotes rest and resists motion is not inert, but acts by pressure and resistance, being constrictive and preservative because of its strength. This explains how, though negation is a disappearance and departure of the contrary force, many things may yet become [b] cold while all the time containing within themselves considerable warmth. There are even some objects which cold solidifies and consolidates the more readily the hotter they are: steel, for example, plunged in water. The Stoics [c] also affirm that in the bodies of infant children the breath is tempered by cooling and, from being a physical substance, becomes a soul. This, however, is debatable; yet since there are many other effects which may be seen to be produced through the agency of cold, we are not justified in regarding it as a negation.

3. Besides, a negation does not permit degrees of less or more. Surely nobody will affirm that one blind man is blinder than another, or one dumb man more silent than another, or one corpse deader than its fellow; but among cold things there is a wide range of deviation from much to little, from very cold to not very, and, generally speaking, in degrees of intensity

[c] *Cf. Mor.* 1052 F: von Arnim, *S.V.F.* ii, pp. 134, 222; and see Hartman's explanation, *De Plutarcho*, p. 566. Von Arnim thinks that the next five chapters also contain Stoic material.

(946) ἀνέσεις, ὥσπερ ἐν τοῖς θερμοῖς, διὰ τὸ[1] τὴν ὕλην πῃ μὲν σφόδρα πῃ δ' ἠρέμα πάσχουσαν ὑπὸ τῶν ἐναντίων δυνάμεων ἕτερα μᾶλλον ἑτέρων καὶ θερμότερα καὶ ψυχρότερα παρέχειν ἐξ ἑαυτῆς. καὶ γὰρ ἕξεως μὲν οὐκ ἔστι μῖξις πρὸς στέρησιν οὐδ'
E ἀναδέχεται δύναμις οὐδεμία τὴν ἀντικειμένην αὐτῇ στέρησιν ἐπιοῦσαν[2] οὐδὲ ποιεῖ κοινωνὸν ἀλλ' ἀντεξίσταται· θερμὰ δ' ἐστὶν ἄχρι οὗ κεραννύμενα ψυχροῖς ὑπομένει, καθάπερ μέλανα λευκοῖς καὶ βαρέσιν ὀξέα καὶ γλυκέσιν αὐστηρά, παρέχοντα τῇ κοινωνίᾳ ταύτῃ καὶ ἁρμονίᾳ χρωμάτων τε καὶ φθόγγων καὶ φαρμάκων καὶ ὄψων προσφιλεῖς πολλὰς καὶ φιλανθρώπους γενέσεις.

Ἡ μὲν γὰρ κατὰ στέρησιν καὶ ἕξιν ἀντίθεσις πολεμικὴ καὶ ἀσύμβατός ἐστιν, οὐσίαν θατέρου τὴν θατέρου φθορὰν ἔχοντος· τῇ δὲ κατὰ τὰς ἐναντίας
F δυνάμεις καιροῦ τυχούσῃ πολλὰ μὲν αἱ τέχναι χρῶνται, πλεῖστα δ' ἡ φύσις ἔν τε ταῖς ἄλλαις γενέσεσι καὶ ταῖς περὶ τὸν ἀέρα τροπαῖς, καὶ ὅσα διακοσμῶν καὶ βραβεύων ὁ θεὸς ἁρμονικὸς καλεῖται καὶ μουσικός, οὐ βαρύτητας συναρμόττων καὶ ὀξύτητας οὐδὲ λευκὰ καὶ μέλανα συμφώνως ὁμιλοῦντα παρέχων ἀλλήλοις, ἀλλὰ τὴν τῆς θερμότητος καὶ ψυχρότητος ἐν κόσμῳ κοινωνίαν καὶ διαφοράν, ὅπως συνοίσονταί τε μετρίως καὶ διοίσονται πάλιν, ἐπιτροπεύων καὶ τὸ ἄγαν ἑκατέρας ἀφαιρῶν εἰς τὸ δέον ἀμφοτέρας καθίστησι.

947 4. Καὶ μὴν ψυχροῦ μὲν αἴσθησις ἔστιν, ὥσπερ

[1] τὸ added by Meziriacus.
[2] ἐπιοῦσαν Madvig : ἐμποιοῦσαν.

and remission, just as there is in hot things. This occurs because the matter involved is in different cases acted upon by the opposing forces with more or less intensity ; it thus exhibits degrees of one or the other. and so of hot and cold. There is, in fact, no such thing as a blending of positive qualities with negative ones, nor may any positive force accept the assault of the negation that corresponds to it or take it into partnership ; instead it gives place to it. Now hot things do admit a blending with cold up to a point, just as do black with white, high notes with low, sweet tastes with sour ; and this harmonious association of colours and sounds, drugs and sauces, produces many combinations that are pleasant and grateful to the senses.

For the opposition of a negation to a positive quality is an irreconcilable hostility, since the existence of the one is the annihilation of the other. The other opposition, however, of positive forces, if it occurs in due measure, is often operative in the arts, and very often indeed in various phenomena of nature, especially in connexion with the weather and the seasons and those matters from which the god derives his title of harmonizer and musician, because he organizes and regulates them. He does not receive these names merely for bringing sounds of high and low pitch, or black and white colours, into harmonious fellowship, but because he has authority over the association and disunion of heat and cold in the universe, to see that they observe due measure in their combination and separation, and because, by eliminating the excess of either, he brings both into proper order.

4. Furthermore, we find that cold can be perceived

(947) καὶ θερμοῦ· στέρησις δ' οὔθ' ὁρατὸν οὔτ' ἀκουστὸν οὔθ' ἁπτὸν οὔτε ταῖς ἄλλαις αἰσθήσεσι γνωστόν. οὐσίας γάρ τινος αἴσθησις ἦν· ὅπου δ' οὐσία μὴ φαίνεται, νοεῖται στέρησις, οὐσίας ἀπόφασις οὖσα, καθάπερ ὄψεως τυφλότης καὶ φωνῆς σιωπὴ καὶ σώματος ἐρημία καὶ κενόν. οὔτε γὰρ κενοῦ δι' ἁφῆς αἴσθησις ἔστιν, ἀλλ' ὅπου μὴ γίνεται σώματος ἁφή, κενοῦ γίνεται νόησις· οὔτε σιγῆς ἀκούομεν, ἀλλά, κἂν μηδενὸς ἀκούωμεν, σιγὴν νοοῦμεν· ὡς δ' αὔτως καὶ τυφλῶν καὶ γυμνῶν[1] οὐκ αἴσθησις
B ἔστιν ἀλλ' αἰσθήσεως ἀποφάσει[2] νόησις. ἔδει τοίνυν μὴ γίνεσθαι ψυχρῶν αἴσθησιν, ἀλλ' ὅπου τὸ θερμὸν ἐπιλείπει νοεῖσθαι τὸ ψυχρόν, εἴπερ ἦν θερμοῦ στέρησις· εἰ δ', ὥσπερ τὸ θερμὸν ἀλέᾳ καὶ διακρίσει τῆς σαρκός, οὕτω συγκρίσει καὶ πυκνώσει τὸ ψυχρὸν αἰσθητόν ἐστι, δῆλον ὅτι καὶ ψυχρότητος ἰδία τις ἔστιν ἀρχὴ καὶ πηγὴ καθάπερ θερμότητος.

5. Ἔτι τοίνυν ἕν τι καὶ ἁπλοῦν ἡ περὶ ἕκαστον εἶδος στέρησις, αἱ δ' οὐσίαι πλείονας διαφορὰς καὶ δυνάμεις ἔχουσι· μονοειδὲς γὰρ ἡ σιωπὴ ποικίλον δ' ἡ φωνή, νῦν μὲν ἐνοχλοῦσα νῦν δὲ τέρπουσα
C τὴν αἴσθησιν. ἔχει δὲ τοιαύτας καὶ τὰ χρώματα καὶ τὰ σχήματα διαφοράς, ἐν αἷς ἄλλοτ' ἄλλως τὸν προστυγχάνοντα διατίθησι· τὸ δ' ἀναφὲς καὶ ἄχρωστον καὶ ὅλως ἄποιον οὐκ ἔχει διαφοράν, ἀλλ' ὅμοιόν ἐστιν.

6. Ἆρ' οὖν ἔοικε τοῖς στερητικοῖς τούτοις τὸ

[1] After γυμνῶν the mss. add καὶ ἀνόπλων; deleted by W. C. H.

as well as heat; but mere negation cannot be seen or heard or touched or recognized by the other senses. Perception, in fact, must be of something existent; but where nothing existent is observed, privation may be inferred, being the negation of existence, as blindness is of sight, silence of sound, void and emptiness of matter. We cannot perceive a void by touch: but where no matter can be touched, void is inferred. Nor can we hear silence; yet, even though we hear nothing, we infer silence. Nor, in the same way, is sense active when things are unseen or bare [a]; there is, rather, inference from the negation of perception. If, therefore, cold were a privation of warmth, we ought not to be able to feel it, but only to infer it from the deficiency in warmth; but if cold is perceived by the contraction and condensation of our flesh (just as heat is by the warming and loosening of it), clearly there is some special first principle and source of coldness, just as there is of heat.

5. And yet another point: privation of any sort is something simple and uncomplicated, whereas substances have many differences and powers. Silence, for example, is of only one kind, while sound varies, sometimes annoying, at other times delighting, the perception. Both colours and figures show the same variation, for they produce different effects on different occasions when they meet the eye: but that which cannot be touched and is without colour or any quality whatever, admits no difference, but is always the same.

6. Is cold, then, so like this sort of privation that

[a] As, when a hill has been stripped of timber, you cannot see the trees.

[2] ἀποφάσει Xylander: ἀπόφασις.

(947) *ψυχρόν, ὥστε μὴ ποιεῖν ἐν τοῖς πάθεσι διαφοράν; ἢ τοὐναντίον ἡδοναί τε μεγάλαι καὶ ὠφέλιμοι τοῖς σώμασιν ἀπὸ ψυχρῶν ὑπάρχουσι καὶ βλάβαι πάλιν νεανικαὶ καὶ πόνοι καὶ βαρύτητες, ὑφ' ὧν οὐκ ἀεὶ φεύγει καὶ ἀπολείπει τὸ θερμὸν ἀλλὰ πολλάκις ἐγκαταλαμβανόμενον ἀνθίσταται καὶ μάχεται, τῇ μάχῃ δ' αὐτῶν ὄνομα φρίκη καὶ τρόμος, ἡττωμένῳ δὲ τῷ θερμῷ τὸ πήγνυσθαι καὶ ναρκᾶν ἐπιγίνεται,*
D *κρατοῦν δὲ τοῦ ψυχροῦ διάχυσιν παρέχει καὶ ἀλέαν τῷ σώματι μεθ' ἡδονῆς, ὅπερ Ὅμηρος " ἰαίνεσθαι " κέκληκεν; ἀλλὰ ταῦτά γε παντὶ δῆλα· καὶ τούτοις οὐχ ἥκιστα τοῖς πάθεσιν ἐνδείκνυται τὸ ψυχρόν, ὅτι πρὸς τὸ θερμὸν ὡς οὐσία πρὸς οὐσίαν ἢ πάθος πρὸς πάθος οὐχ ὡς ἀπόφασις ἀντίκειται καὶ στέρησις, οὐδὲ φθορά τίς ἐστι τοῦ θερμοῦ καὶ ἀναίρεσις ἀλλ' ὑπαρκτὴ*[1] *φύσις καὶ δύναμις. ἢ καὶ τὸν χειμῶνα τῶν ὡρῶν καὶ τὰ βόρεια τῶν πνευμάτων ἐξέλωμεν, ὡς στερήσεις ὄντα τῶν θερμῶν καὶ*
E *νοτίων, ἰδίαν δ' ἀρχὴν οὐκ ἔχοντα.*

7. Καὶ *μὴν τεττάρων γε τῶν πρώτων ὄντων ἐν τῷ παντὶ σωμάτων, ἃ διὰ πλῆθος καὶ ἁπλότητα καὶ δύναμιν οἱ πλεῖστοι στοιχεῖα τῶν ἄλλων ὑποτίθενται καὶ ἀρχάς, πυρὸς καὶ ὕδατος καὶ ἀέρος καὶ γῆς, ἀναγκαῖόν ἐστι καὶ ποιότητας εἶναι τὰς πρώτας καὶ ἁπλᾶς τοσαύτας. τίνες οὖν εἰσιν αὗται πλὴν θερμότης καὶ ψυχρότης καὶ ξηρότης*

[1] *ὑπαρκτὴ* W. C. H. after Madvig : *φθαρτική*.

[a] See, *e.g.*, *Odyssey*, vi. 156 ; *Iliad*, xxiii. 598, 600 ; and *cf. Mor.* 454 D, 735 F.

it produces no effects that differ? Or is the contrary true: Do not great and useful pleasures accrue to our bodies from the presence of cold, as well as mighty detriments and pains and depressions, before which the heat does not always depart and quit the field? Often, rather, though cut off within, it makes a stand and gives battle. This struggle of hot and cold is called shivering or shaking; and if heat is overcome, freezing and torpor set in; but if cold is defeated, there is diffused through the body a relaxed and pleasantly warm sensation which Homer [a] calls "to be aglow." Surely these facts are obvious to everyone; and it is chiefly by these effects that cold is shown to be in opposition to heat, not as a negation or privation, but as one substance or one state [b] to another: it is not a mere destruction or abolition of heat, but a positive substance or force. Otherwise we might just as well exclude winter from the list of seasons or the northerly blasts from that of winds, on the pretext that they are only a deficiency of hot weather or southerly gales and have no proper origin of their own.

7. Furthermore, given four primary bodies in the universe [c] which, because of their quantity, simplicity, and potentiality, most judges regard as being the elements or first principles of everything else—I mean fire, water, air, and earth—the number of primary, simple qualities must be the same. And what should these be but warmth and cold, dryness

[b] Heat, for example, may be said to be a "state" or condition of metal.

[c] See Diels-Kranz, *Frag. der Vorsok.*[5], i, pp. 315 ff., Empedocles, frag. B 17. The doctrine is clearly stated by, for example, Pliny, *Nat. Hist.* ii. 10. The author of the *Epinomis* (981 c) adds a fifth element, aether (*cf.* 951 D *infra*).

(947) καὶ ὑγρότης, αἷς[1] τὰ στοιχεῖα πάσχειν ἅπαντα καὶ ποιεῖν πέφυκεν; ὡς δὲ τῶν ἐν γραμματικῇ στοιχείων βραχύτητές εἰσι καὶ μακρότητες, τῶν δ' ἐν
F μουσικῇ βαρύτητες καὶ ὀξύτητες, οὐ θάτερα τῶν ἑτέρων στέρησις, οὕτως ἐν τοῖς φυσικοῖς σώμασιν ἀντιστοιχίαν[2] ὑποληπτέον ὑγρῶν πρὸς ξηρὰ καὶ ψυχρῶν πρὸς θερμά, τὸ κατὰ λόγον ἅμα καὶ τὰ φαινόμενα διαφυλάττοντας· ἤ, καθάπερ Ἀναξιμένης ὁ παλαιὸς ᾤετο, μήτε τὸ ψυχρὸν ἐν οὐσίᾳ μήτε τὸ θερμὸν ἀπολείπωμεν, ἀλλὰ πάθη κοινὰ τῆς ὕλης ἐπιγινόμενα ταῖς μεταβολαῖς; τὸ γὰρ συστελλόμενον αὐτῆς καὶ πυκνούμενον ψυχρὸν εἶναί φησι, τὸ δ' ἀραιὸν καὶ τὸ χαλαρόν (οὕτω πως ὀνομάσας[3] τῷ ῥήματι), θερμόν. ὅθεν οὐκ ἀπεικότως λέγεσθαι τὸ καὶ θερμὰ τὸν ἄνθρωπον ἐκ τοῦ στόματος καὶ
948 ψυχρὰ μεθιέναι· ψύχεται γὰρ ἡ πνοὴ πιεσθεῖσα καὶ πυκνωθεῖσα τοῖς χείλεσιν, ἀνειμένου δὲ τοῦ στόματος ἐκπίπτουσα γίνεται θερμὸν ὑπὸ μανότητος. τοῦτο μὲν οὖν ἀγνόημα ποιεῖται τοῦ ἀνδρὸς ὁ Ἀριστοτέλης· ἀνειμένου γὰρ τοῦ στόματος ἐκπνεῖσθαι τὸ θερμὸν ἐξ ἡμῶν αὐτῶν, ὅταν δὲ συστρέψαντες τὰ χείλη φυσήσωμεν, οὐ τὸν ἐξ ἡμῶν, ἀλλὰ τὸν ἀέρα τὸν πρὸ τοῦ στόματος ὠθεῖσθαι ψυχρὸν ὄντα καὶ προσεμπίπτειν.

[1] αἷς] ἃς Post, deleting καὶ after ἅπαντα.
[2] ἀντιστοιχίαν Meziriacus: ἀντιστοιχείων.
[3] καὶ after ὀνομάσας deleted by Hartman.

[a] Post translates his emendation: "by which all things are qualified through the natural action of the elements," pointing out that elements have nothing but size, shape, and motion. Fire causes heat, but its atoms are not themselves hot.

and moisture, which by their very nature cause all the elements to act and be acted upon ? [a] Just as in grammar we have elements long and short and in music elements high and low in pitch—and in neither case is one element merely a negation of the other—so also in physical bodies we must assume an elementary opposition of wet to dry and cold to hot, and in this way we shall be faithful both to logic and to experience. Or are we, as old Anaximenes [b] maintained, to leave neither hot nor cold in the realm of being, but to treat them as states belonging equally to any matter and occurring as a result of changes within it ? He affirms, in fact, that anything which undergoes contraction and condensation of matter is cold, while anything that suffers rarefaction and distention—this comes close to his own phrasing—is hot. So there is no contradiction in the remark that the man blew both hot and cold,[c] for breath grows cold when it is compressed and condensed by the lips ; but when it is expelled from the mouth left slack, it becomes hot through rarefaction. Aristotle,[d] however, holds that in this Anaximenes was mistaken : when the mouth is slack, what is exhaled is warm air from our own bodies ; but when we compress the lips and blow, it is not air from ourselves, but the cold air in front of the mouth that is propelled forward and makes contact.

[b] Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 95 ; *cf.* Diller, *Hermes*, lxvii, pp. 35 f.

[c] See Aesop's *Fables* (no. 60 in Chambry's Budé edition, vol. i, pp. 131 ff.), where the satyr renounces friendship with the man because the latter blows both hot and cold through the same mouth.

[d] Probably (*cf.* the note on 950 B *infra*) *Problemata*, xxxiv. 7 (964 a 10 ff.) ; contrast Plato, *Timaeus*, 79 A-C.

(948) 8. Εἰ δ' ἀπολειπτέον οὐσίαν ψυχροῦ καὶ θερμοῦ, προάγωμεν ἐπὶ τὸ ἑξῆς τὸν λόγον, ἥτις ἐστὶν οὐσία
B καὶ ἀρχὴ καὶ φύσις ψυχρότητος, ζητοῦντες· οἱ μὲν οὖν, τῶν σκαληνῶν καὶ τριγωνοειδῶν σχηματισμῶν ἐν τοῖς σώμασι κειμένων,[1] τὸ ῥιγοῦν καὶ τρέμειν καὶ φρίττειν καὶ ὅσα συγγενῆ τοῖς πάθεσι τούτοις ὑπὸ τραχύτητος ἐγγίνεσθαι λέγοντες, εἰ καὶ τοῖς κατὰ μέρος διαμαρτάνουσι, τὴν γοῦν ἀρχὴν ὅθεν δεῖ λαμβάνουσι· δεῖ γὰρ ὥσπερ ἀφ' ἑστίας τῆς τῶν ὅλων οὐσίας ἄρχεσθαι τὴν ζήτησιν. ᾧ καὶ μάλιστα δόξειεν ἂν ἰατροῦ καὶ γεωργοῦ καὶ αὐλητοῦ διαφέρειν ὁ φιλόσοφος. ἐκείνοις μὲν γὰρ ἐξαρκεῖ τὰ ἔσχατα τῶν αἰτίων θεωρῆσαι· τὸ γὰρ ἐγγυτάτω τοῦ πάθους αἴτιον ἂν συνοφθῇ, πυρετοῦ μὲν ἔντασις[2]
C ἢ παρέμπτωσις, ἐρυσίβης δ' ἥλιοι πυριφλεγεῖς ἐπ' ὄμβρῳ, βαρύτητος δὲ κλίσις αὐλῶν καὶ συναγωγὴ πρὸς ἀλλήλους, ἱκανόν ἐστι τῷ τεχνίτῃ πρὸς τὸ οἰκεῖον ἔργον. τῷ δὲ φυσικῷ θεωρίας ἕνεκα μετιόντι τἀληθὲς ἡ τῶν ἐσχάτων γνῶσις οὐ τέλος ἐστὶν ἀλλ' ἀρχὴ τῆς ἐπὶ τὰ πρῶτα καὶ ἀνωτάτω πορείας. διὸ καὶ Πλάτων ὀρθῶς καὶ Δημόκριτος[3] αἰτίαν θερμότητος καὶ βαρύτητος ζητοῦντες οὐ κατέπαυσαν ἐν γῇ καὶ πυρὶ τὸν λόγον ἀλλ' ἐπὶ τὰς

[1] κειμένων] σειομένων Sandbach.
[2] ἔντασις] ἔνστασις Turnebus from Galen.
[3] Δημόκριτος] Ξενοκράτης Wyttenbach.

[a] *Cf.* Plato, *Timaeus*, 53 c, 54 b-c.
[b] Or, perhaps, "with Hestia," as the first principle of the cosmos (see, for example, Ritter, on Plato, *Phaedrus*, 247 a, pp. 123-124 of his edition). This passage is somewhat obscurely quoted below in 954 f. There were already three different

8. Perhaps we should now leave the question whether heat and cold are substances ; if so, let us advance the argument to the next point and inquire what sort of substance coldness has, and what is its first principle and nature. Now those who affirm that there are certain uneven, triangular formations in our bodies [a] and that shivering and trembling, shuddering and the like manifestations, proceed from this rough irregularity, even if they are wrong in the particulars, at least derive the first principle from the proper place ; for the investigation should begin, as it were from the very hearth,[b] from the substance of all things. This is, it would seem, the great difference between a philosopher and a physician or a farmer or a flute-player ; for the latter are content to examine the causes most remote from the first cause, since as soon as the most immediate cause of an effect is grasped—that fever is brought about by exertion or an overflow of blood, that rusting of grain is caused by days of blazing sun after a rain, that a low note is produced by the angle and construction of the pipes—that is enough to enable a technician to do his proper job. But when the natural philosopher sets out to find the truth as a matter of speculative knowledge, the discovery of immediate causes is not the end, but the beginning of his journey to the first and highest causes. This is the reason why Plato and Democritus,[c] when they were inquiring into the causes of heat and heaviness, were right not to stop their investigation with earth and fire, but

interpretations known to the scholiast on Plato, *Euthyphro*, 3 A (p. 2, ed. Greene).

[c] Wyttenbach suggested "Xenocrates" for "Democritus" in this passage, which may be right, though his proposal is not considered by either Mullach or Heinze.

(948) νοητὰς ἀναφέροντες ἀρχὰς τὰ αἰσθητὰ μέχρι τῶν ἐλαχίστων ὥσπερ σπερμάτων προῆλθον.

9. Οὐ μὴν ἀλλὰ καὶ τὰ αἰσθητὰ ταυτὶ προανακινῆσαι βέλτιόν ἐστιν, ἐν οἷς Ἐμπεδοκλῆς τε καὶ D Στράτων καὶ οἱ Στωικοὶ τὰς οὐσίας τίθενται τῶν δυνάμεων, οἱ μὲν Στωικοὶ τῷ ἀέρι τὸ πρώτως ψυχρὸν ἀποδιδόντες, Ἐμπεδοκλῆς δὲ καὶ Στράτων τῷ ὕδατι· τὴν δὲ γῆν ἴσως ἂν ἕτερος φανείη ψυχρότητος οὐσίαν ὑποτιθέμενος. πρότερον δὲ τὰ ἐκείνων σκοπῶμεν.

Ἐπεὶ τὸ πῦρ θερμὸν ἅμα καὶ λαμπρόν ἐστι, δεῖ τὴν ἀντικειμένην τῷ πυρὶ φύσιν ψυχράν τ' εἶναι καὶ σκοτεινήν· ἀντίκειται γὰρ ὡς τῷ λαμπρῷ τὸ ζοφερόν, οὕτω τῷ θερμῷ τὸ ψυχρόν· ἔστι γὰρ ὡς ὄψεως τὸ σκοτεινόν, οὕτω τὸ ψυχρὸν ἁφῆς συγχυτικόν· ἡ δὲ θερμότης διαχεῖ τὴν αἴσθησιν τοῦ ἁπτομένου καθάπερ ἡ λαμπρότης τοῦ ὁρῶντος. τὸ E ἄρα πρώτως σκοτεινὸν ἐν τῇ φύσει πρώτως καὶ ψυχρόν ἐστιν. ὅτι δ' ἀὴρ τὸ πρώτως σκοτεινόν ἐστιν, οὐδὲ τοὺς ποιητὰς λέληθεν· ἀέρα γὰρ τὸ σκότος καλοῦσιν·

"ἀὴρ γὰρ παρὰ νηυσὶ βαθὺς[1] ἦν, οὐδὲ σελήνη
οὐρανόθεν προὔφαινε."

καὶ πάλιν

"ἠέρα ἑσσάμενοι πᾶσαν φοιτῶσιν ἐπ' αἶαν."[2]

[1] MSS. of Homer have περὶ and βαθεῖ'.
[2] καὶ πάλιν . . . αἶαν are omitted by most MSS. and are unknown to Wyttenbach.

[a] Cf. Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 319, frag. B 21, part of which is quoted below in 949 F.

to go on carrying back sensible phenomena to rational origins until they reached, as it were, the minimum number of seeds.

9. Nevertheless it is better for us first to attack things perceptible to the senses, in which Empedocles [a] and Strato [b] and the Stoics [c] locate the substances that underlie the qualities, the Stoics ascribing the primordially cold to the air, Empedocles and Strato to water; and someone else may, perhaps, be found to affirm that earth is the original substance of coldness.[d] But let us examine Stoic doctrine before the others.

Since fire is not only warm but bright, the opposite natural entity (they say) must be both cold and dark: as gloomy is the opposite of bright, so is cold of hot. Besides, as darkness confounds the sight, so cold confuses the sense of touch. Heat, on the other hand, transmits the sensation of touching, as brightness does that of seeing. It follows, then, that in nature the primordially dark is also the primordially cold; and that it is air which is primordially dark does not, in fact, escape the notice of the poets since they use the term "air" for "darkness":

> Thick air lay all about the ships, nor could
> The moon shine forth from heaven.[e]

And another instance:

> So clad in air they visit all the earth.[f]

[b] See Fritz Wehrli, *Die Schule des Aristoteles*, Part V, frag. 49.

[c] *Cf. Mor.* 952 c, 1053 F; von Arnim, *S.V.F.* ii, pp. 140 f.

[d] As Plutarch himself: see below, 952 c ff. (chapters 17-22).

[e] Homer, *Odyssey*, ix. 144-145. Words for "air" in Homer often mean "mist" or "fog."

[f] Hesiod, *Works and Days*, 255.

(948) καὶ πάλιν

“αὐτίκα δ' ἠέρα μὲν σκέδασεν καὶ ἀπῶσεν ὀμίχλην,
ἠέλιος δ' ἐπέλαμψε, μάχη δ' ἐπὶ πᾶσα φαάνθη.”

καὶ γὰρ “κνέφας” τὸν ἀφώτιστον ἀέρα καλοῦσι, κενόν, ὡς ἔοικε, φάους ὄντα· καὶ “νέφος” ὁ συμ-
F πεσὼν καὶ πυκνωθεὶς ἀὴρ ἀποφάσει φωτὸς κέκληται· κνηκὶς[1] δὲ καὶ ἀχλὺς καὶ ὀμίχλη καὶ ὅσα τοῦ φωτὸς οὐ παρέχει τῇ αἰσθήσει δίοψιν ἀέρος εἰσὶ διαφοραί· καὶ τὸ ἀειδὲς αὐτοῦ καὶ ἄχρωστον Ἅιδης καὶ Ἀχέρων ἐπίκλησιν ἔσχεν. ὥσπερ οὖν αὐγῆς ἐπιλιπούσης σκοτεινὸς ἀήρ, οὕτω θερμοῦ μεταστάντος τὸ ἀπολειπόμενον ἀὴρ ψυχρὸς ἄλλο δ' οὐδέν ἐστι· διὸ καὶ Τάρταρος οὕτως[2] ὑπὸ ψυχρότητος κέκληται· δηλοῖ δὲ καὶ Ἡσίοδος εἰπὼν “Τάρταρον[3] ἠερόεντα”· καὶ τὸ ῥιγοῦντα πάλλεσθαι καὶ τρέμειν “ταρταρίζειν.” ταῦτα μὲν οὖν τοιοῦτον ἔχει λόγον.

10. Ἐπεὶ δ' ἡ φθορὰ μεταβολή τίς ἐστι τῶν
949 φθειρομένων εἰς τοὐναντίον ἑκάστῳ, σκοπῶμεν εἰ καλῶς εἴρηται τὸ “πυρὸς θάνατος ἀέρος γένεσις.” θνῄσκει γὰρ καὶ πῦρ ὥσπερ ζῷον, ἢ βίᾳ σβεννύμενον ἢ δι' αὑτοῦ μαραινόμενον. ἡ μὲν οὖν σβέσις ἐμφανεστέραν ποιεῖ τὴν εἰς ἀέρα μεταβολὴν αὐτοῦ·

[1] κνηκὶς Meziriacus from 951 B: καλεῖται.
[2] οὕτως Emperius: οὗτος.
[3] τάρταρον] MSS. of Hesiod have Τάρταρά τ'.

[a] Homer, *Iliad*, xvii. 649-650.
[b] Plutarch's etymologies here are no more scientific or convincing than those to be found in his *Roman Questions*, L.C.L. vol. iv, pp. 6-171.

And another :

> The air at once he scattered and dispelled the mist ;
> The sun shone forth and all the battle came in view.[a]

They also call the lightless air *knephas*, being as it were, *kenon phaous* " void of light " ; and collected and condensed air has been termed *nephos* " cloud " because it is a negation of light.[b] Flecks in the sky and mist and fog and anything else that does not provide a transparent medium for light to reach our senses are merely variations of air ; and its invisible and colourless part is called Hades and Acheron.[c] In the same way, then, as air is dark when light is gone, so when heat departs the residue is cold air and nothing else. And this is the reason why it has been termed Tartarus because of its coldness. Hesiod [d] makes this obvious when he writes " murky Tartarus " ; and to shake and shiver with cold is to " tartarize." [e] Such, then, is the reason for these names.

10. Since corruption, in each case, is a change of the things that are corrupted into their opposites, let us see whether the saying holds good that " the death of fire is the birth of air." [f] Fire, indeed, perishes like a living creature,[g] being either extinguished by main force or dying out of itself. Now if it is extinguished, that makes the change of fire

[c] " Invisible " : *cf.* 953 A below and Plato, *Cratylus*, 403 A ff. ; *Phaedo*, 81 C-D and contrast *Mor.* 942 F *supra* : " colourless," *achroston*, *Acheron*. *Cf.* L. Parmentier, " Recherches sur le traité d'Isis et d'Osiris de Plut.," *Mém. Acad. Belg.* ii. 2 (1912/13), pp. 71 ff.

[d] *Theogony*, 119 : contrast Plato, *Phaedo*, 112 A ff.

[e] *Cf.* Servius on Vergil, *Aen.* vi. 577.

[f] Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 168, Heraclitus, frag. 76 (frag. 25, ed. Bywater, p. 11). *Cf. Mor.* 392 C-D.

[g] *Cf. Mor.* 281 F, 702 E-F ; 703 B.

(949) καὶ γὰρ ὁ καπνὸς ἀέρος ἐστὶν εἶδος καὶ ἡ κατὰ Πίνδαρον "ἀέρα[1] κνισᾶντι λακτίζοισα καπνῷ" λιγνὺς καὶ ἀναθυμίασις. οὐ μὴν ἀλλὰ καὶ φθινούσης ἀτροφίᾳ φλογὸς ἰδεῖν ἔστιν, ὥσπερ ἐπὶ τῶν λύχνων, τὸ ἄκρον εἰς ἀέρα γνοφώδη[2] καὶ ζοφερὸν ἀποχεόμενον.[3] ἱκανῶς δὲ καὶ ὁ τῶν μετὰ λουτρὸν ἢ πυρίαν περιχεαμένων[4] ψυχρὸν ἀνιὼν ἀτμὸς ἐνδείκνυται τὴν εἰς ἀέρα τοῦ θερμοῦ φθειρομένου μεταβολήν,
B ὡς φύσει πρὸς τὸ πῦρ ἀντικείμενον· ᾧ τὸ πρώτως τὸν ἀέρα σκοτεινὸν εἶναι καὶ ψυχρὸν ἠκολούθει.

11. Καὶ μὴν ἁπάντων γε τῶν γινομένων ὑπὸ ψυχρότητος ἐν τοῖς σώμασι σφοδρότατον καὶ βιαιότατον ἡ πῆξις οὖσα, πάθος μέν ἐστιν ὕδατος, ἔργον δ' ἀέρος· αὐτὸ μὲν γὰρ καθ' ἑαυτὸ τὸ ὕδωρ εὐδιάχυτον καὶ ἀπαγὲς καὶ ἀσύστατόν ἐστιν, ἐντείνεται δὲ καὶ συνάγεται τῷ ἀέρι σφιγγόμενον ὑπὸ ψυχρότητος· διὸ καὶ λέλεκται

"εἰ δὲ νότος βορέην προκαλέσσεται, αὐτίκα νίψει."

τοῦ γὰρ νότου καθάπερ ὕλην τὴν ὑγρότητα παρα-
C σκευάσαντος, ὁ βόρειος ἀὴρ ὑπολαβὼν ἔπηξε. καὶ δῆλόν ἐστι μάλιστα περὶ τὰς χιόνας· ἀέρα γὰρ μεθεῖσαι καὶ προαναπνεύσασαι λεπτὸν καὶ ψυχρὸν οὕτω ῥέουσιν. Ἀριστοτέλης δὲ καὶ τὰς ἀκόνας τοῦ μολίβδου τήκεσθαί φησι καὶ ῥεῖν ὑπὸ κρύους καὶ

[1] Plutarch's mss. have ἀέρος κνίσσ' ἀντιλακτίζουσα. mss. of Pindar read αἰθέρα.

[2] γνοφῶδες? W. C. H.: Kronenberg deleted the preceding καί.

[3] ἀποχεόμενον the Basel edition of 1525: ἀποχεομένων: ἀπερχόμενον Kronenberg.

[4] περιχεαμένων] other mss. have περιεχομένων and περιχεομένων.

into air more conspicuous. Smoke, in fact, is a form of air, as is reek and exhalation, which, to quote Pindar,[a]

Stabs at the air with unctuous smoke.

Nevertheless, even when fire goes out for lack of nourishment, one may see, as for instance in the case of lamps, the apex of the flame passing off into murky, dusky air. Moreover, the vapour ascending from our bodies when, after a bath or sweat, cold water is poured on them, sufficiently illustrates the change of heat, as it perishes, into the air ; and this implies that it is the natural opposite of fire. From this the Stoics drew the conclusion that air was primordially dark and cold.

11. Moreover, freezing, which is the most extreme and violent effect of cold in bodies, is a condition of water, but a function of air. For water of itself is fluid, uncongealed and not cohesive ; but when it is compressed by air because of its cold state, it becomes taut and compact. This is the reason for the saying [b]

If Southwind challenges North, instantly snow will appear.

For after the Southwind has collected the moisture as raw material, the Boreal air takes over and congeals it. This is particularly evident in snowfields : when they have discharged a preliminary exhalation of air that is thin and cold, they melt.[c] Aristotle [d] also declares that whetstones of lead will melt and become fluid in the wintertime through excess of cold

[a] *Isth.* iv. 112.

[b] Included without authority among Callimachus's fragments (787 = anon. 384) by Schneider, but rejected by Pfeiffer.

[c] *Cf. Mor.* 691 F and Hubert's references *ad loc.*

[d] Frag. 212, ed. Rose and *cf. Mor.* 695 D.

(949) χειμῶνος, ὕδατος μὲν οὐ[1] πλησιάζοντος αὐταῖς· ὁ δ' ἀήρ, ὡς ἔοικε, συνελαύνων τὰ σώματα τῇ ψυχρότητι καταθραύει καὶ ῥήγνυσιν.

12. Ἔτι τοίνυν τὰ μὲν ἀποσπασθέντα τῆς πηγῆς ὕδατα μᾶλλον πήγνυται· μᾶλλον γὰρ ὁ ἀὴρ ἐπικρατεῖ τοῦ ἐλάττονος. ἂν δέ τις ψυχρὸν ἐκ φρέατος ὕδωρ λαβὼν ἐν ἀγγείῳ καὶ καθεὶς αὖθις εἰς τὸ φρέαρ ὥστε μὴ ψαύειν τοῦ ὕδατος τὸ ἀγγεῖον ἀλλ'
D ἐν τῷ ἀέρι κρέμασθαι, περιμείνῃ χρόνον οὐ πολύν, ἔσται ψυχρότερον τὸ ὕδωρ· ᾧ μάλιστα δηλοῦται τὸ μὴ τοῦ ὕδατος εἶναι τὴν πρώτην αἰτίαν τῆς ψυχρότητος ἀλλὰ τοῦ ἀέρος. τῶν γε μὴν μεγάλων ποταμῶν οὐδεὶς πήγνυται διὰ βάθους· οὐ γὰρ καθίησιν εἰς ὅλον ὁ ἀήρ, ἀλλ' ὅσα τῇ ψυχρότητι περιλαμβάνει ψαύων καὶ πλησιάζων, ταῦθ' ἵστησιν· ὅθεν οἱ βάρβαροι διαβαίνουσι πεζῇ, προβαλόντες ἀλώπεκας· ἂν γὰρ μὴ πολὺς ἀλλ' ἐπιπόλαιος ὁ πάγος ᾖ, αἰσθανόμεναι τῷ ψόφῳ τοῦ ὑπορρέοντος ἀναστρέφουσιν. ἔνιοι δὲ καὶ θηρεύουσιν ἰχθῦς,
E ὕδατι θερμῷ τοῦ πάγου παραλύοντες καὶ χαλῶντες τό γε τὴν ὁρμιὰν δεξόμενον.[2] οὕτως οὐδὲν ὑπὸ τοῦ ψυχροῦ τὸ ἐν βάθει πέπονθε. καίτοι τῶν ἄνω τοσαύτη γίνεται μεταβολὴ διὰ τὴν πῆξιν, ὥστε συντρίβειν τὰ πλοῖα τὸ ὕδωρ ἀποβιαζόμενον εἰς ἑαυτὸ καὶ συνθλιβόμενον, ὡς ἱστοροῦσιν οἱ νῦν

[1] μὲν οὐ Post : μόνου.
[2] τό γε . . . δεξόμενον Wyttenbach ; τότε . . . δεξαμένων.

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[a] There is here probably a confusion of lead and tin, for both of which the term *stannum* is used in Latin. Tin is reduced to powder by severe cold, owing to transformation to its allotrope. In [Aristotle], *De Mir. Ausc.* 50 (p. 257, L.C.L.) the more nearly correct statement appears that tin melts in

when no water is anywhere near them; it seems probable that the air with its coldness forces the bodies together until it crushes and breaks them.[a]

12. Furthermore, portions of water will freeze sooner than the spring from which they are drawn, for the air more readily masters the smaller amount. If you will draw from a well cold water in a jar [b] and let it down again into the well in such a way that the jar does not touch the water, but is suspended in the air, and if you wait a short time, you will find that the water has become colder.[c] This is very good evidence that the First Cause of coldness is not water but air. Certainly, none of the great rivers freezes through its entire depth; for the air does not penetrate down into the whole, but merely renders stationary as much as, by contact and proximity, it includes within the range of its coldness. And this is the reason why barbarians [d] do not cross frozen rivers until they have tried them out with foxes: if the ice is not thick, but merely superficial, the foxes perceive this by the sound of the current running underneath and return to the bank. Some even catch fish by weakening and softening the ice with hot water—enough of the ice, at least, to admit their lines; so the cold has no effect at a depth. Yet the water near the surface undergoes so great a change through freezing that ships are crushed by it when it is forced in on itself and squeezed tight, as those relate who recently passed the winter

severe cold. This note is due to the suggestion of O. T. Benfey of Haverford College.

[b] Presumably Plutarch is thinking of a jar of porous earthenware, such as are commonly used to cool water in the Near East.

[c] *Cf. Mor.* 690 B-E.

[d] The Thracians, according to 968 F ff. *infra*; *cf.* also Pliny, *Nat. Hist.* viii. 103; Aelian, *De Natura Animal.* vi. 24; xiv. 26.

(949) μετὰ τοῦ Καίσαρος ἐπὶ τοῦ Ἴστρου διαχειμάσαντες. οὐ μὴν ἀλλὰ καὶ τὸ περὶ ἡμᾶς συμβαῖνον ἱκανὴν μαρτυρίαν δίδωσι· μετὰ γὰρ τὰ λουτρὰ καὶ τὰς ἐξιδρώσεις περιψυχόμεθα μᾶλλον, τοῖς σώμασιν ἀνειμένοις καὶ διακεχυμένοις πολλὴν ψυχρότητα μετὰ τοῦ ἀέρος καταδεχόμενοι. τὸ δ' αὐτὸ τοῦτο καὶ τὸ ὕδωρ πάσχει· ψύχεται γάρ, ἂν προθερμανθῇ, μᾶλλον, εὐπαθέστερον τῷ ἀέρι γενόμενον· οἵ τε[1] τὰ
F ζέοντα τῶν ὑδάτων ἀναρύτοντες[2] καὶ μετεωρίζοντες οὐδὲν ἄλλο δήπου ποιοῦσιν ἢ πρὸς ἀέρα πολὺν ἀνακεραννύουσιν. ὁ μὲν οὖν τῷ ἀέρι τὴν πρώτην ἀποδιδοὺς τῆς ψυχρότητος δύναμιν, ὦ Φαβωρῖνε, λόγος ἐν τοιαύταις ἐστὶ πιθανότησιν.

13. Ὁ δὲ τῷ ὕδατι λαμβάνει μὲν καὶ αὐτὸς ἀρχὰς ὁμοίως, οὕτω πως τοῦ Ἐμπεδοκλέους λέγοντος

“ ἠέλιον μὲν λαμπρὸν[3] ὅρα[4] καὶ θερμὸν ἁπάντῃ,
ὄμβρον δ' ἐν πᾶσι δνοφόεντά τε ῥιγαλέον τε ”·

τῷ γὰρ θερμῷ τὸ ψυχρὸν ὡς τῷ λαμπρῷ τὸ μέλαν ἀντιτάξας συλλογίσασθαι δέδωκεν, ὅτι τῆς αὐτῆς οὐσίας ἐστὶ τὸ μέλαν καὶ τὸ ψυχρόν, ὡς τῆς αὐτῆς
950 τὸ λαμπρὸν καὶ τὸ θερμόν. ὅτι δ' οὐ τοῦ ἀέρος τὸ μέλαν ἀλλὰ τοῦ ὕδατός ἐστιν, ἡ αἴσθησις ἐπιμαρτυρεῖ, τῷ μὲν ἀέρι μηδενὸς ὡς ἁπλῶς εἰπεῖν μελαινομένου τῷ δ' ὕδατι πάντων. ἂν γὰρ τὸ λευκότατον ἐμβάλῃς ἔριον εἰς ὕδωρ ἢ ἱμάτιον, ἀναφαί-

[1] οἵ τε Wyttenbach : ὁπότε.
[2] ἀναρύτοντες Turnebus : ἀνορύττοντες.
[3] λαμπρὸν] λευκὸν Aristotle.
[4] ὅρα] ὁρᾶν Aristotle and Simplicius.

[a] Probably the reference is to Trajan and the Second

with Caesar [a] on the Danube. Nevertheless, what happens in our own case is ample testimony: after warm baths and sweats we are cooler, since our bodies are relaxed and porous, so that we take in a good deal of cold along with the air.[b] The same thing happens to water, too: it freezes faster when it has first been heated, thus becoming more susceptible to air; and those who draw off boiling water and suspend it in the air do this, surely, only to secure the admixture of great quantities of air.[b] So now, Favorinus, the argument that attributes the primal force of cold to the air depends on such plausibilities as these.

13. But the argument which attributes it to water finds in the same way facts to support it; Empedocles [c] says something like this:

> Behold the sun, everywhere bright and warm;
> And then the rain, to all men dark and cold.

By thus setting cold against hot, as he does dark against bright, he has given us to understand that dark and cold belong to the same substance, as do also bright and hot. And our senses bear witness that darkness is an attribute of water, not of air, since nothing, to put it simply, is blackened by air and everything is by water.[d] For if you throw the whitest wool or the whitest garment into water, it will come

Dacian War (A.D. 105–107). Plutarch's intimate friend, Sosius Senecio, is known to have taken part in it.

[b] *Cf. Mor.* 690 C-D.

[c] Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 319, frag. B 21, lines 3 and 5. Plutarch apparently used a version different from those known to Aristotle and Simplicius. The evidence is complicated and may be consulted in Diels-Kranz. On Empedocles' meaning see Cherniss, *Aristotle's Criticism of the Presocratics*, p. 110.

[d] *Cf. Mor.* 364 B.

(950) νεται μέλαν καὶ διαμένει, μέχρι ἂν ὑπὸ θερμότητος ἐξικμασθῇ τὸ ὑγρὸν ἢ τισι στρέβλαις καὶ βάρεσιν ἐκπιεσθῇ· τῆς τε γῆς ὕδατι ῥαινομένης, διαμελαίνουσιν οἱ καταλαμβανόμενοι ταῖς σταγόσι τόποι, τῶν ἄλλων ὁμοίων μενόντων. αὐτοῦ μὲν οὖν τοῦ ὕδατος σκοτεινότατον ὑπὸ πλήθους φαίνεται τὸ
B βαθύτατον, οἷς δ' ἀὴρ πλησιάζει, ταῦτα περιλάμπεται καὶ διαγελᾷ. τῶν δ' ἄλλων ὑγρῶν διαφανὲς μάλιστα τοὔλαιόν ἐστι, πλείστῳ χρώμενον ἀέρι· τούτου δὲ τεκμήριον ἡ κουφότης, δι' ἣν ἐπιπολάζει πᾶσιν ὑπὸ τοῦ ἀέρος ἀναφερόμενον. ποιεῖ δὲ καὶ[1] γαλήνην ἐν τῇ θαλάττῃ τοῖς κύμασιν ἐπιρραινόμενον, οὐ διὰ τὴν λειότητα τῶν ἀνέμων ἀπολισθανόντων, ὡς Ἀριστοτέλης ἔλεγεν· ἀλλὰ παντὶ μὲν ὑγρῷ τὸ κῦμα διαχεῖται πληττόμενον, ἰδίως δὲ τοὔλαιον αὐγὴν καὶ καταφάνειαν ἐν βυθῷ παρέχει, διαστελλομένων τῷ ἀέρι τῶν ὑγρῶν· οὐ γὰρ μόνον ἐπιπολῆς τοῖς[2] διανυκτερεύουσιν ἀλλὰ καὶ κάτω
C τοῖς σπογγοθήραις διαφυσώμενον ἐκ τοῦ στόματος ἐν τῇ θαλάττῃ φέγγος ἐνδίδωσιν. οὐ μᾶλλον οὖν τῷ ἀέρι τοῦ μέλανος ἢ τῷ ὕδατι μέτεστιν, ἧττον δὲ τοῦ ψυχροῦ. τὸ γοῦν ἔλαιον, ἀέρος πλείστου τῶν ὑγρῶν μετέχον, ἥκιστα ψυχρόν ἐστι καὶ πήγνυται μαλακῶς· ὁ γὰρ ἀὴρ ἐγκεκραμένος οὐκ ἐᾷ σκληρὰν γενέσθαι τὴν πῆξιν· βελόνας δὲ καὶ πόρπας σιδηρᾶς καὶ τὰ λεπτὰ[3] τῶν ἔργων οὐχ ὕδατι βάπτουσιν ἀλλ' ἐλαίῳ, τὴν ἄγαν ψυχρότητα φοβούμενοι τοῦ

[1] τὴν after καὶ deleted by Dübner.
[2] τοῖς] missing in nearly all MSS.

out black and it will remain black until the moisture is evaporated by heat or is squeezed out by some sort of wringing or pressure. When a patch of ground is sprinkled, the spots which are covered by the drops turn black, but the rest remains as it was. In fact, of water itself the deepest looks the darkest because there is so much of it, while those parts that lie near the air flash and sparkle [a]; and of the other liquids oil is the most transparent, as containing the most air. A proof of this is its lightness, by reason of which it maintains itself on the surface of all other things, buoyed up by the air.[b] If it is sprinkled upon the waves, it will calm the sea, not because it is so smooth that the winds slip off it, as Aristotle [c] affirmed; but because the waves are dissipated when they are struck by any moist substance. But it is peculiar to oil that it provides light and sight at the bottom since the moist elements are interspersed with air; it is, in fact, not only on the surface that it provides light for those who pass the night at sea; it does so also for sponge-divers [d] below the surface when it is blown out of their mouths. Air, therefore, has no greater proportion of darkness than water has, and it has less cold. Certainly oil, which has more air than any other moist substance, is least cold; and when it freezes, it forms a soft jelly: the air that is intermixed does not permit it to freeze hard. They dip needles, iron clasps, and all delicate artifacts in oil rather than in water, fearing that the water's excessive frigidity

[a] *Cf.* 952 F *infra.* [b] *Cf. Mor.* 696 B, 702 B.
[c] *Problemata*, 961 a 23 ff., though this work is surely not by Aristotle in the form in which it has come down to us.
[d] *Cf.* 981 E *infra*; Oppian, *Hal.* v. 638 ff.

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[3] λεπτὰ Madvig: λοιπά.

(950) ὕδατος ὡς διαστρέφουσαν. ἀπὸ τούτων γὰρ δικαιότερόν ἐστιν ἐξετάζεσθαι τὸν λόγον οὐκ ἀπὸ τῶν χρωμάτων· ἐπεὶ καὶ χιὼν καὶ χάλαζα καὶ κρύσταλλος ἅμα λαμπρότατα γίνεται καὶ ψυχρότατα· καὶ
D πάλιν πίττα θερμότερόν ἐστι μέλιτος καὶ σκοτωδέστερον.

14. Ὅμως δὲ θαυμάζω τῶν ἀξιούντων τὸν ἀέρα ψυχρὸν εἶναι διὰ τὸ καὶ σκοτεινόν, εἰ μὴ συνορῶσιν ἑτέρους ἀξιοῦντας θερμὸν εἶναι διὰ τὸ καὶ κοῦφον. οὐ γὰρ οὕτω τῷ ψυχρῷ τὸ σκοτεινὸν ὡς τὸ βαρὺ καὶ στάσιμον οἰκεῖόν ἐστι καὶ συγγενές· πολλὰ γὰρ ἄμοιρα θερμότητος ὄντα μετέχει λαμπηδόνος, ἐλαφρὸν δὲ καὶ κοῦφον καὶ ἀνωφερὲς οὐδέν ἐστι τῶν ψυχρῶν. ἀλλὰ καὶ τὰ νέφη, μέχρι μὲν ἀέρος οὐσίᾳ μᾶλλον προσήκει, μετεωρίζεται· μεταβαλόντα δ' εἰς
E ὑγρὸν εὐθὺς ὀλισθάνει καὶ τὸ κοῦφον οὐχ ἧττον ἢ τὸ θερμὸν ἀποβάλλει, ψυχρότητος ἐγγινομένης· καὶ τοὐναντίον ὅταν θερμότης ἐπέλθῃ, πάλιν ἀναστρέφει τὴν κίνησιν, ἅμα τῷ μεταβαλεῖν εἰς ἀέρα τῆς οὐσίας ἄνω φερομένης.

Καὶ μὴν οὐδὲ τὸ τῆς φθορᾶς ἀληθές ἐστιν· οὐ γὰρ εἰς τοὐναντίον ἀλλ' ὑπὸ τοῦ ἐναντίου φθείρεται τῶν ἀπολλυμένων ἕκαστον, ὥσπερ τὸ πῦρ ὑπὸ τοῦ ὕδατος εἰς τὸν ἀέρα. τὸ γὰρ ὕδωρ ὁ μὲν Αἰσχύλος εἰ καὶ τραγικῶς ἀλλ' ἀληθῶς εἶπε

"παύσυβριν[1] δίκην πυρός"·

Ὅμηρος δὲ τῷ ποταμῷ τὸν Ἥφαιστον καὶ τῷ Ποσειδῶνι τὸν Ἀπόλλωνα κατὰ τὴν μάχην φυ-
F σικῶς μᾶλλον ἢ μυθικῶς ἀντέταξεν. ὁ δ' Ἀρχί-

may distort them. It is, in fact, fairer to judge the argument by this evidence than by that of colour, since snow and hail and ice are at their brightest when they are coldest. Moreover, pitch is both hotter and darker than honey.

14. I am surprised, nevertheless, when those who maintain that the air is cold because it is dark do not perceive that others think it must be hot because it is light. For darkness is not so closely connected and akin to cold as heaviness and stability are; many things, in fact, which have no heat are bright, but nothing cold is buoyant, light, and soaring. Why, the very clouds, as long as they are akin to the substance of air, float aloft; but as soon as they change to moisture, they fall at once and lose their lightness no less than their warmth as coldness grows within them. Contrariwise, when heat supervenes, they reverse the movement again, for their substance begins to soar as soon as it has changed to air.

Nor is the argument from destruction true either; for when anything is destroyed, it does not perish by becoming its opposite, though it does perish by the action of its opposite, as fire, for instance, is changed by water into air. For of water Aeschylus [a] speaks in tragic style, but accurately, as

The riot-quelling justicer of fire.

And when Homer [b] matched Hephaestus against the river and Apollo against Poseidon in the battle, he did it rather as a philosopher than as a poet. And

[a] Nauck, *Trag. Graec. Frag.* pp. 107-108, frag. 360.
[b] *Iliad*, xxi. 330-383; 435-469. The river is the Xanthus.

[1] πανύσυβριν Bernardakis: παῦε ὕδωρ.

(950) λοχος ἐπὶ τῆς τἀναντία φρονούσης οὐ κακῶς εἶπε

"τῇ μὲν ὕδωρ ἐφόρει
δολοφρονέουσα χειρί, τητέρῃ δὲ πῦρ."

ἐν δὲ Πέρσαις τῶν ἱκετευμάτων μέγιστον ἦν καὶ ἀπαραίτητον, εἰ πῦρ λαβὼν ὁ ἱκετεύων καὶ ἐν ποταμῷ βεβηκὼς ἀπειλοίη μὴ τυχὼν τὸ πῦρ εἰς τὸ ὕδωρ ἀφήσειν· ἐτύγχανε μὲν γὰρ ὧν ἐδεῖτο, τυχὼν δ' ἐκολάζετο διὰ τὴν ἀπειλὴν ὡς παρὰ νόμον καὶ κατὰ τῆς φύσεως γενομένην. καὶ τοῦτο δὴ τὸ πρόχειρον ἅπασι "πῦρ ὕδατι μιγνύναι" τὸ παροιμιαζόμενον ἐν[1] τοῖς ἀδυνάτοις, μαρτυρεῖν ἔοικεν ὅτι τῷ πυρὶ τὸ ὕδωρ πολέμιόν ἐστι καὶ ὑπὸ τούτου φθεί-
951 ρεται καὶ κολάζεται σβεννύμενον, οὐχ ὑπὸ τοῦ ἀέρος ὃς τοὐναντίον[2] ὑπολαμβάνει τὴν οὐσίαν αὐτοῦ καὶ δέχεται μεταβάλλοντος. εἰ γὰρ ἅπαν[3] εἰς ὃ μεταβάλλει τὸ φθειρόμενον ἐναντίον ἐστί, τί μᾶλλον τῷ ἀέρι τὸ πῦρ ἢ τὸ ὕδωρ ἐναντίον φανεῖται; μεταβάλλει γὰρ εἰς ὕδωρ συνιστάμενος εἰς δὲ πῦρ διακρινόμενος· ὥσπερ αὖ πάλιν τὸ ὕδωρ διακρίσει μὲν εἰς ἀέρα φθείρεται συγκρίσει δ' εἰς γῆν, ὡς μὲν ἐγὼ νομίζω δι' οἰκειότητα τὴν πρὸς ἀμφότερα καὶ συγγένειαν, οὐχ ὡς ἐναντίον ἑκατέρῳ καὶ πολέμιον. ἐκεῖνοι δέ, ὁποτέρως ἂν εἴπωσι, τὸ ἐπι-
B χείρημα διαφθείρουσι. πήγνυσθαί γε μὴν ὑπὸ τοῦ

[1] ἐν] ἐπὶ van Herwerden : Hartman would delete τὸ παροιμιαζόμενον ἐν τοῖς ἀδυνάτοις.
[2] ὃς τοὐναντίον Post : τίον ὡς, τεῖνον ὡς or a lacuna in the MSS.
[3] ἅπαν Bernardakis : αἰτία.

[a] Diehl, *Anthologia Lyrica Graeca*, i. 237, frag. 86; Edmonds, *Elegy and Iambus* (L.C.L.), ii, p. 146, frag. 93;

Archilochus [a] expressed himself well on a woman who was of two minds :

With guileful thoughts she bore
In one hand water, in the other fire.

Among the Persians it was the most compelling plea to gain an end, one which would admit no refusal, if the suppliant took fire, stood in a river, and threatened that if he lost his suit, he would drop the fire into the water. Now he got what he asked, but though he did so, he was punished for the threat, on the ground that it was contrary to law and against nature. Again, the familiar proverb that is on everyone's lips,[b] "to mix fire with water," as an example of the impossible, seems to bear witness that water is hostile to fire, which is destroyed by it and so is punished by being extinguished [c] ; it is not so affected by air, which, on the contrary, supports fire and welcomes it in its changed form. For if anything into which the thing destroyed changes is its opposite, why will fire, any more than water, seem opposite to air ? For air changes into water by condensation, and into fire by rarefaction just as, on the other hand, water vanishes into air by rarefaction, but into earth by condensation. Now these processes take place, in my opinion, not because these elements are contrary or hostile to one another, but because they are in close affinity and relationship. But my opponents,[d] whichever way they state their case, ruin their proof. Certainly it is per-

quoted again in *Mor.* 1070 A, *Life of Demetrius*, 35 (905 E).

[b] But, curiously enough, not to be found in the *Paroemiographi Graeci*, as edited by Leutsch and Schneidewin.

[c] *Cf.* the quotation from Aeschylus *supra*, 950 E.

[d] Presumably those who, in 950 D *supra*, claim that air is cold because it is dark.

(951) ἀέρος φάναι τὸ[1] ὕδωρ ἀλογώτατόν ἐστιν, αὐτὸν τὸν ἀέρα μηδαμοῦ πηγνύμενον ὁρῶντας. νέφη γὰρ καὶ ὀμίχλαι καὶ κνηκίδες οὐ πήξεις εἰσὶν ἀλλὰ συστάσεις καὶ παχύτητες ἀέρος διεροῦ καὶ ἀτμώδους· ὁ δ' ἄνικμος καὶ ξηρὸς οὐδ' ἄχρι ταύτης τὴν κατάψυξιν ἐνδέχεται τῆς μεταβολῆς. ἔστι γὰρ ἃ τῶν ὀρῶν οὐ λαμβάνει νέφος οὐδὲ δρόσον οὐδ' ὀμίχλην, εἰς καθαρὸν ἀέρα καὶ ἄμοιρον ὑγρότητος ἐξικνούμενα τοῖς ἄκροις· ᾧ μάλιστα δῆλόν ἐστιν ὡς ἡ κάτω πύκνωσις καὶ σύστασις τῷ ἀέρι συμμεμειγμένον ὑγρὸν καὶ ψυχρὸν ἐνδίδωσι.

15. Τὰ δὲ κάτω τῶν μεγάλων ποταμῶν οὐ πήγνυται κατὰ λόγον. τὰ γὰρ ἄνω παγέντα τὴν ἀναθυμίασιν οὐ διίησιν,[2] ἀλλ' ἐγκαθειργνυμένη καὶ
C ἀποστρεφομένη θερμότητα παρέχει τοῖς διὰ βάθους ὑγροῖς· ἀπόδειξις δὲ τούτου τὸ λυομένου τοῦ πάγου πάλιν ἀτμὸν πολὺν ἐκ τῶν ὑγρῶν ἀναφέρεσθαι. διὸ καὶ τὰ τῶν ζῴων σώματα χειμῶνός ἐστι θερμότερα τῷ συνέχειν τὸ θερμὸν ἐν ἑαυτοῖς ὑπὸ τῆς ἔξωθεν ψυχρότητος εἴσω συνελαυνόμενον.

Αἱ δ' ἀναρύσεις καὶ μετεωρίσεις οὐ μόνον τὸ θερμὸν ἐξαιροῦσι τῶν ὑδάτων ἀλλὰ καὶ τὸ ψυχρόν· ὅθεν ἥκιστα τὰς χιόνας καὶ τὸ συνθλιβόμενον ὑγρὸν ἀπ' αὐτῶν οἱ σφόδρα ψυχροῦ δεόμενοι κινοῦσιν· ἐκστατικὸν γὰρ ἀμφοῖν ἡ κίνησις.

Ὅτι δ' οὐκ ἀέρος ἐστὶν ἀλλ' ὕδατος ἡ τοιαύτη δύναμις, οὕτως ἄν τις ἐξ ὑπαρχῆς ἐπέλθοι. πρῶτον

[1] τὸ added by Benseler.
[2] διίησιν Wyttenbach: διίεσιν.

fectly absurd for them to say that water is frozen by air when they have never seen air itself freezing. For clouds, mists, and flecks in the sky are not congelations, but condensations and thickenings of air that is moist and vaporous. But waterless, dry air never admits loss of heat to the point where such a change might occur. There are, in fact, mountains which do not know clouds or dew or mist because their peaks reach a region of pure air that has no humidity at all. From this fact it is especially obvious that it is the condensation and density below that contribute to air the cold, moist element that is found in combination with it.

15. It is reasonable that the lower portion of large rivers should not freeze ; for the upper portion, being frozen, does not transmit the exhalation which is, accordingly, shut in and turned back, and so provides heat for the deep waters. A demonstration of this is the fact that when the ice melts again a great quantity of vapour rises from the waters. This is also the reason why the bodies of animals are warmer in the winter, because the heat is driven inwards by the cold from without and they keep it within them.

Now drawing off water and suspending it in the air [a] not only takes away its warmth, but its coldness also ; those, therefore, who want a very cold drink take care not to disturb the snowpacks [b] or the wet matter that is formed from them by compression, for movement expels both heat and cold.

That such a function of cold belongs not to air, but to water, may be demonstrated as follows from a fresh

[a] *Cf.* 949 F *supra* ; *Mor.* 690 B-E.

[b] *Cf. Mor.* 691 C—692 A for snow packed in chaff and the like.

(951) D μὲν οὐκ εἰκός ἐστιν ἀέρα, τῷ αἰθέρι γειτνιῶντα καὶ ψαύοντα τῆς περιφορᾶς καὶ ψαυόμενον οὐσίας[1] πυρώδους, τὴν ἐναντίαν ἔχειν δύναμιν· οὔτε γὰρ ἄλλως δυνατὸν ἁπτόμενα καὶ συνεχῆ τοῖς πέρασιν ὄντα δύο σώματα μὴ πάσχειν ὑπ' ἀλλήλων, εἰ δὲ πάσχειν, μὴ ἀναπίμπλασθαι τῆς τοῦ κρείττονος δυνάμεως τὸ ἧττον[2]· οὔτε τὴν φύσιν ἔχει λόγον ἐφεξῆς τῷ φθείροντι τάξαι τὸ φθειρόμενον, ὥσπερ οὐ κοινωνίας οὖσαν οὐδ' ἁρμονίας ἀλλὰ πολέμου καὶ μάχης δημιουργόν. χρῆται μὲν γὰρ ἐναντίοις εἰς τὰ ὅλα πράγμασι[3]· χρῆται δ' οὐκ ἀκράτοις οὐδ' ἀντιτύποις, ἀλλ' ἐναλλάξ τινα θέσιν καὶ τάξιν οὐκ ἀναιρετικὴν ἀλλὰ κοινωνικὴν δι' ἑτέρων καὶ συνεργὸν ἐν μέσῳ παραπλεκομένην[4] ἔχουσι· καὶ ταύτην εἴληφεν ὁ ἀήρ, ὑποκεχυμένος τῷ πυρὶ πρὸ τοῦ ὕδατος καὶ διαδιδοὺς
E ἐπ' ἀμφότερα καὶ συνάγων, οὔτε θερμὸς ὢν αὐτὸς οὔτε ψυχρὸς ἀλλὰ ψυχροῦ καὶ θερμοῦ μετακέρασμα καὶ κοινώνημα, μειγνυμένων ἐν αὐτῷ μῖξιν ἀβλαβῆ καὶ μαλακῶς ἀνιεῖσαν[5] καὶ δεχομένην τὰς ἐναντίας ἀκρότητας.

16. Ἔπειτα πανταχοῦ μὲν ἐστιν ἀὴρ ἴσος, οὐ πανταχοῦ δὲ χειμὼν ὅμοιος οὐδὲ ψῦχος. ἀλλὰ ταῦτα μὲν τὰ μέρη ψυχρὰ καὶ κάθυγρα, ταῦτα δὲ ξηρὰ καὶ θερμὰ τῆς οἰκουμένης οὐ κατὰ τύχην, ἀλλὰ τῷ μίαν οὐσίαν ψυχρότητος καὶ ὑγρότητος

[1] οὐσίας Xylander : οὔσης.
[2] δύο . . . ἧττον are omitted in most mss.
[3] χρῆται μὲν . . . πράγμασι are omitted in most mss., in B also, but not in E.
[4] παραπλεκομένην E and most mss. : παραπεπλεγμένην B.
[5] ἀνιεῖσαν Turnebus : ἐνιεῖσαν.

start. In the first place, it is improbable that air, which lies adjacent to the aether [a] and touches and is touched by the revolving fiery substance, should have a force that is contrary to that of aether. For one thing, it is impossible for two substances whose boundaries touch and are contiguous not to be acted upon by each other—and if acted upon, for the weaker not to be contaminated by the force that resides in the stronger. Nor is it reasonable to suppose that Nature has placed side by side destroyer and victim, as though she were the author of strife and dissension, not of union and harmony. She does, indeed, make use of opposites to constitute the universe ; yet she does not employ them without a tempering element, or where they will collide. She disposes them rather so that a space is skipped and an inserted strip duly assigned whereby they will not destroy one another, but may enjoy communication and co-operation. And this strip is occupied by air, suffused as it is through a space under the fire [b] between it and water. It makes distribution both ways and receives contributions from both, being itself neither hot nor cold, but a blending and union of the two. When these are so fused, they meet without injury and the fused matter sends forth or takes to itself the opposing extremes [c] without violence.

16. Then, too, air is everywhere equal, though neither winter nor cold is identical everywhere. It is no accident that some parts of the world are cold and damp, while others are hot and dry ; it is due to the existence of a single substance that includes

[a] On the difference between *aer* and *aether* see the lucid discussion of Guthrie, *The Greeks and their Gods*, pp. 207 f.

[b] That is, the aether. See also Cherniss, *op. cit.* p. 126.

[c] Heat and cold.

(951) F εἶναι. Λιβύης μὲν γὰρ ἔνθερμος ἡ πολλὴ καὶ ἄνυδρος, Σκυθίαν δὲ καὶ Θρᾴκην καὶ Πόντον οἱ πεπλανημένοι λίμνας τε μεγάλας ἔχειν καὶ ποταμοῖς διαρρεῖσθαι βαθέσι καὶ πολλοῖς ἱστοροῦσιν· αὐτῶν τε τῶν ἐν μέσῳ τόπων τὰ παράλιμνα καὶ ἑλώδη ψῦχος ἔχει μάλιστα διὰ τὰς ἀπὸ τῶν ὑγρῶν ἀναθυμιάσεις· Ποσειδώνιος δὲ τῆς ψυχρότητος αἰτίαν εἰπὼν τὸ πρόσφατον εἶναι τὸν ἕλειον ἀέρα καὶ νοτερὸν οὐκ ἔλυσε τὸ πιθανόν, ἀλλὰ πιθανώτερον ἐποίησεν· οὐ γὰρ ἂν ἐφαίνετο τοῦ ἀέρος ὁ πρόσφατος ἀεὶ ψυχρότερος, εἰ μὴ τὸ ψυχρὸν ἐν τοῖς ὑγροῖς τὴν γένεσιν εἶχε. βέλτιον οὖν Ὅμηρος

952 "αὔρη δ' ἐκ ποταμοῦ ψυχρὴ πνέει ἠῶθι[1] πρό,"

τὴν πηγὴν τῆς ψυχρότητος ἔδειξεν.

Ἔτι τοίνυν ἡ μὲν αἴσθησις πολλάκις ἡμᾶς ἐξαπατᾷ, ὅταν ἱματίων ἢ ἐρίων ψυχρῶν θιγγάνωμεν, οἰομένους ὑγρῶν θιγγάνειν διὰ τὸ κοινὴν ἀμφοτέροις οὐσίαν ὑπάρχειν καὶ τὰς φύσεις συγγενεῖς[2] εἶναι καὶ οἰκείας. ἐν δὲ τοῖς δυσχειμέροις κλίμασι πολλὰ ῥηγνύει τὸ ψῦχος ἀγγεῖα καὶ χαλκᾶ καὶ κεραμεᾶ· κενὸν δ' οὐδὲν ἀλλὰ πάντα[3] πλήρη, βιαζομένου τῇ ψυχρότητι τοῦ ὕδατος. καίτοι φησὶ Θεόφραστος τὸν ἀέρα ῥηγνύναι τὰ ἀγγεῖα τῷ ὑγρῷ καθάπερ B ἥλῳ[4] χρώμενον· ὅρα δὲ μὴ τοῦτο κομψῶς μᾶλλον

[1] πνέει ἠῶθι] omitted in most MSS., which also write πρός.
[2] συγγενεῖς Kronenberg : σύνεγγυς.
[3] πάντα] omitted in most MSS.
[4] ἥλῳ Turnebus : ἡλίῳ.

[a] Plutarch may be thinking of the old kingdom of Pontus, which included tracts south, east, and north of the Black Sea.
[b] The fragment has not yet been numbered in L. Edel-

coldness and wetness in one. The greater part of Africa is hot and without water; while those who have travelled through Scythia, Thrace, and Pontus [a] report that these regions have great lakes or marshes and are traversed by many deep rivers. As for the regions that lie between, those that are near lakes and marshes are especially cold because of the exhalations from the water. Posidonius,[b] then, in affirming that the freshness and moistness of marsh air is the reason for the cold, has done nothing to disturb the plausibility of the argument; he has, rather, made it more plausible. For fresh air would not always seem colder if cold did not take its origin from moisture. So Homer [c] spoke more truly when he affirmed

> The river-air blows chill before the dawn,

thereby indicating the source of coldness.

Our senses, moreover, often deceive us and we imagine, when we touch cold garments or cold wool, that we are touching moist objects: this is because wet and cold have a common substance and their natures have a close affinity and relationship. In very cold climates the low temperature often breaks vessels whether they are of bronze or of clay—not, of course, when they are empty, but only when they are full and the water exerts pressure by means of its coldness. Theophrastus,[d] to be sure, declares that the air breaks these vessels, using the liquid as a spike. But take care [e] that there isn't more wit than

stein's forthcoming collection; for the literature see *A.J.P.* lvii (1936), p. 301 and n. 61. [c] *Odyssey*, v. 469.

[d] The fragment is apparently omitted by Wimmer.

[e] This seems to be addressed to Favorinus's Peripatetic sympathies.

(952) ἢ ἀληθῶς εἰρημένον ᾖ· ἔδει γὰρ τὰ πίττης γέμοντα μᾶλλον ῥήγνυσθαι ὑπὸ τοῦ ἀέρος καὶ τὰ γάλακτος.

Ἀλλ' ἔοικε τὸ ὕδωρ ἐξ ἑαυτοῦ ψυχρὸν εἶναι καὶ πρώτως· ἀντίκειται γὰρ τῇ ψυχρότητι πρὸς τὴν θερμότητα τοῦ πυρός, ὥσπερ τῇ ὑγρότητι πρὸς τὴν ξηρότητα καὶ τῇ βαρύτητι πρὸς τὴν κουφότητα. καὶ ὅλως τὸ μὲν πῦρ διαστατικόν ἐστι καὶ διαιρετικόν, τὸ δ' ὕδωρ κολλητικὸν καὶ σχετικόν, τῇ ὑγρότητι συνέχον καὶ πῆττον· ᾗ καὶ παρέσχεν Ἐμπεδοκλῆς ὑπόνοιαν, ὡς τὸ μὲν πῦρ "νεῖκος οὐλόμενον," "σχεδύνην" δὲ "φιλότητα" τὸ ὑγρὸν
C ἑκάστοτε προσαγορεύων· ἐπεὶ τροφὴ μὲν πυρὸς τὸ μεταβάλλον εἰς πῦρ, μεταβάλλει δὲ τὸ συγγενὲς καὶ οἰκεῖον, τὸ δ' ἐναντίον δυσμετάβλητον, ὡς τὸ ὕδωρ· καὶ αὐτὸ μὲν ὡς ἔπος εἰπεῖν ἄκαυστόν ἐστιν, ὕλην δὲ καὶ πόαν νοτερὰν καὶ ξύλα βεβρεγμένα δυσκαῆ παρέχει, καὶ φλόγα ζοφερὰν καὶ ἀμβλεῖαν ὑπὸ χλωρότητος ἀναδίδωσι τῷ ψυχρῷ μαχόμενον πρὸς τὸ θερμὸν ὡς φύσει πολέμιον.

17. Σκόπει δὴ καὶ ταῦτα παραβάλλων ἐκείνοις. ἐπειδὴ γάρ[1] Χρύσιππος οἰόμενος τὸν ἀέρα πρώτως ψυχρὸν εἶναι, διότι καὶ σκοτεινόν, ἐμνήσθη μόνον τῶν πλέον ἀφεστάναι τὸ ὕδωρ τοῦ αἰθέρος ἢ τὸν ἀέρα λεγόντων, καὶ πρὸς αὐτούς τι βουλόμενος εἰπεῖν, "οὕτω μὲν ἄν," ἔφη, "καὶ τὴν γῆν ψυχρὰν εἶναι πρώτως λέγοιμεν, ὅτι τοῦ αἰθέρος ἀφέστηκε

[1] ἐπειδὴ γὰρ Wyttenbach : ἐπεὶ δὲ καί.

[a] That is, than those full of water.

[b] Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 318, frag. B 19. Plutarch seems to have mistaken Empedocles' meaning, though some would invoke frag. B 34. In general, while

truth in such a remark! For if it were so, vessels full of pitch or of milk would more readily be broken by the air.[a]

Water, however, seems to be cold of itself, and primordially so. It is the antithesis, in its coldness, to the heat of fire, just as in its wetness to the dryness of fire, and in its heaviness to the other's lightness. To sum up: fire is of a disintegrating and separative nature, while water is adhesive and retentive, holding and gluing together by means of its moistness. Empedocles[b] alluded to this, when, as often as he mentioned them, he termed Fire a "Destructive Strife" and Water "Tenacious Love." For the nourishment of fire is that which can be changed into fire and only things that have affinity and a close relationship to it can be so changed; while its opposites, like water, are not easily changed to fire. Water itself is practically incombustible, and it renders matter such as damp grass and moist timber very hard to consume; the greenness in them produces a dusky, dull flame because, by dint of cold, it struggles against heat as against its natural enemy.

17. Now you must pursue the subject by comparing these arguments with those of my opponents. For Chrysippus,[c] thinking that the air is primordially cold because it is also dark, merely mentioned those who affirm that water is at a greater distance from the aether[d] than is air; and, wishing to make them some answer, he said, "If so, we might as well declare that even earth is primordially cold because it is at the

Plutarch is said to have written ten books on Empedocles (Lamprias catalogue no. 43), he does not seek the difficult poet's meaning very carefully.

[c] Von Arnim, *S.V.F.* ii, p. 140; *cf. Mor.* 1053 E.

[d] See 951 D *supra*.

(952) D πλεῖστον," ὡς ἀδόκιμόν τινα παντελῶς τοῦτον καὶ ἄτοπον ἀπορρίψας τὸν λόγον, ἐγώ μοι δοκῶ μηδὲ τὴν γῆν ἄμοιρον εἰκότων καὶ πιθανῶν ἀποφαίνειν,[1] ποιησάμενος ἀρχὴν ᾧ μάλιστα Χρύσιππος ὑπὲρ τοῦ ἀέρος κέχρηται. τί δὲ τοῦτ' ἐστί; τὸ σκοτεινὸν ὄντα πρώτως εἶναι καὶ ψυχρὸν πρώτως.[2] εἰ γὰρ δύο λαβὼν οὗτος ἀντιθέσεις δυνάμεων οἴεται τῇ ἑτέρᾳ καὶ τὴν ἑτέραν ἐξ ἀνάγκης ἕπεσθαι, μυρίαι δήπουθέν εἰσιν ἀντιτάξεις καὶ ἀντιπάθειαι πρὸς τὸν αἰθέρα[3] τῆς γῆς, αἷς καὶ ταύτην ἄν τις ἀκολουθεῖν ἀξιώσειεν. οὐ γὰρ ὡς βαρεῖα πρὸς κοῦφον καὶ
E καταρρεπὴς πρὸς ἀνωφερὲς ἀντίκειται μόνον, οὐδ' ὡς πυκνὴ πρὸς ἀραιὸν οὐδ' ὡς βραδεῖα καὶ στάσιμος πρὸς ὀξύρροπον καὶ κινητικόν, ἀλλ' ὡς βαρυτάτη πρὸς κουφότατον καὶ πυκνοτάτη πρὸς ἀραιότατον, καὶ τέλος ὡς ἀκίνητος ἐξ ἑαυτῆς πρὸς αὐτοκίνητον καὶ τὴν μέσην χώραν ἐπέχουσα πρὸς ἀεὶ κυκλοφορούμενον. οὐκ ἄτοπον οὖν τηλικαύταις καὶ τοσαύταις ἀντιτάξεσι καὶ τὴν τῆς ψυχρότητος καὶ θερμότητος ἕπεσθαι. ναί, ἀλλὰ τὸ πῦρ λαμπρόν ἐστιν. οὔτι μὴν[4] σκοτεινὸν ἡ γῆ; σκοτεινότατον
F μὲν οὖν ἁπάντων καὶ ἀφεγγέστατον. ἀέρι μέν γε[5] μετοχὴ φωτός ἐστι πρώτῳ, καὶ τάχιστα τρέπεται καὶ ἀναπλησθεὶς διανέμει πανταχοῦ τὴν λαμπρότητα, σῶμα παρέχων τῆς αὐγῆς ἑαυτόν· ὁ γὰρ ἥλιος ἀνίσχων, ὥς τις εἶπε τῶν διθυραμβοποιῶν,

" εὐθὺς ἀνέπλησεν ἀεροβατᾶν μέγαν οἶκον ἀνέμων "·

[1] ἀποφανεῖν Hatzidakis.
[2] εἶναι καὶ ψυχρὸν πρώτως added by Patzig.
[3] αἰθέρα Leonicus : ἀέρα.
[4] οὔτι μὴν] the text is that of E : B and other mss. have several lacunae.

greatest distance from the aether"—tossing off this argument as if it were utterly inadmissible and absurd. But I have a mind to maintain the thesis that earth too is not destitute of probable and convincing arguments, and I shall start with the one that Chrysippus has found most serviceable for air. And what is this? Why, that it is primordially dark and cold. For if he takes these two pairs of opposing forces and assumes that one must of necessity accompany the other, there are, surely, innumerable oppositions and antipathies between the aether and the earth with which one might suppose this to be consistent. For it is not only opposed as heavy to light and as moving by gravity downwards, not upwards, or as dense to rare or as slow and stable to mobile and active, but as heaviest to lightest and as densest to rarest and, finally, as immovable of itself to self-moving, and as occupying the central position in the universe to revolving forever around a centre. It is not absurd, then, if oppositions so numerous and important carry with them the opposition of cold and heat as well. "Yes," Chrysippus may say, "but fire is bright." Is not the earth, then, dark? Why, it is the darkest and most unilluminated of all things. Certainly air is first of all to participate in light; it is instantly altered and when it is saturated, it distributes illumination everywhere, lending itself to light as a body in which to reside. For when the sun arises, as one of the dithyrambic writers [a] has said,

It straightway fills the mighty home of the air-borne winds.

[a] Diehl, *Anthologia Lyrica Graeca*, ii. 302; Edmonds, *Lyra Graeca* (L.C.L.), iii, p. 460 (adespota no. 95).

[5] γε] γὰρ Meziriacus.

(952) ἐκ τούτου δὲ καὶ λίμνῃ καὶ θαλάττῃ μοῖραν αὐγῆς κατιὼν ἐνίησι καὶ βυθοὶ ποταμῶν διαγελῶσιν, ὅσον ἀέρος ἐξικνεῖται πρὸς αὐτούς. μόνη δ' ἡ γῆ τῶν σωμάτων ἀεὶ ἀφώτιστός ἐστι καὶ ἄτρωτος ὑφ' ἡλίου καὶ σελήνης τῷ φωτίζοντι, θάλπεται δ' ὑπ' αὐτῶν καὶ παρέχει χλιαίνειν ἐπ' ὀλίγον βάθος[1]
953 ἐνδυομένῳ τῷ θερμῷ· τὸ δὲ λαμπρὸν οὐ παρίησιν ὑπὸ στερεότητος ἀλλ' ἐπιπολῆς περιφωτίζεται, τὰ δ' ἐντὸς ὄρφνη καὶ χάος καὶ Ἀίδης ὀνομάζεται· καὶ τὸ ἔρεβος τοῦτ' ἦν ἄρα, τὸ χθόνιον καὶ ἔγγαιον σκότος. τὴν δὲ νύκτα ποιηταὶ μὲν ἐκ γῆς γεγονέναι μυθολογοῦσι, μαθηματικοὶ δὲ σκιὰν γῆς οὖσαν ἀποδεικνύουσιν ἀντιφραττούσης πρὸς τὸν ἥλιον· ὁ γὰρ ἀὴρ ἀναπίμπλαται σκότους ὑπὸ γῆς ὡς φωτὸς ὑφ' ἡλίου· καὶ τὸ ἀφώτιστον αὐτοῦ μῆκός ἐστι νυκτός, ὅσον ἡ σκιὰ τῆς γῆς ἐπινέμεται. διὸ τῷ μὲν ἐκτὸς ἀέρι καὶ νυκτὸς οὔσης ἄνθρωποί τε χρῶνται καὶ
B θηρία πολλὰ νομὰς ποιούμενα διὰ σκότους, ἁμωσγέπως ἴχνη φωτὸς καὶ ἀπορροὰς αὐγῆς ἐνδιεσπαρμένας ἔχοντος· ὁ δ' οἰκουρὸς καὶ ὑπωρόφιος, ἅτε δὴ τῆς γῆς πανταχόθεν περιεχούσης, κομιδῇ τυφλός ἐστι καὶ ἀφώτιστος. ἀλλὰ μὴν καὶ δέρματα καὶ κέρατα ζῴων ὅλα μὲν οὐ διίησιν αὐγὴν ὑπὸ στερεότητος, ὅταν δὲ πρισθῇ καὶ καταξεσθῇ, γίνεται διαφανῆ, παραμιχθέντος αὐτοῖς τοῦ ἀέρος. οἶμαι δὲ

[1] βάθος Wyttenbach : κάρος or φάρος.

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[a] *Cf.* Aeschylus, *Prometheus*, 90, and 950 B *supra*.
[b] The Invisible Place, according to the etymology adopted above in 948 F.

Next the air, moving downward, infuses a part of its brightness into the lakes and the sea, and the depths of the rivers flash brightly,[a] to the extent that air is able to penetrate them. Of all bodies only the earth remains constantly without light, impenetrable to the illumination of sun or moon ; yet it is warmed by them and permits the heat to sink in and warm it up to a slight depth. But because it is solid, earth does not give passage to light, but is encircled by light on its surface only, while the inner parts are called Darkness and Chaos and Hades [b]—so that Erebus [c] turns out to be the subterranean and interior darkness. Then, too, the poets tell us that Night was born of Earth [d] and mathematicians demonstrate that night is the shadow of Earth blocking the light of the sun. The air, indeed, is saturated with darkness by the earth, just as it is with light by the sun. The unlighted portion of the air is the area of night, amounting to the space occupied by the earth's shadow. This is the reason why men make use of the air out of doors even when it is night, as well as many beasts which do their pasturing in the darkness, since it retains some vestiges of light and dispersed glimmerings of radiance ; but the house-bound man who is under a roof is utterly blind and without light inasmuch as there the earth envelops him from all directions. Whole skins, furthermore, and horns of animals do not let light pass through them because of their solidity ; yet if sections are sawed off and polished, they become translucent when once the air has been mixed with them. It is also my opinion

[c] Hesiod, *Theogony*, 125. The original meaning of Erebus is actually " darkness ".

[d] *Cf.* Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 331, Empedocles, frag. B 48 ; *cf. Mor.* 1006 F.

(953) καὶ μέλαιναν ἑκάστοτε τὴν γῆν ὑπὸ τῶν ποιητῶν καλεῖσθαι διὰ τὸ σκοτῶδες καὶ τὸ ἀφώτιστον· ὥστε καὶ τὴν πολυτίμητον ἀντίθεσιν τοῦ σκοτεινοῦ πρὸς τὸ λαμπρὸν ἐπὶ τῆς γῆς μᾶλλον ἢ τοῦ ἀέρος ὑπάρχειν.

C 18. Ἀλλ' αὕτη μὲν ἀπήρτηται τοῦ ζητουμένου· πολλὰ γὰρ δέδεικται ψυχρὰ τῶν λαμπρῶν ὄντα καὶ θερμὰ τῶν ἀμαυρῶν καὶ σκοτεινῶν. ἐκεῖναι δὲ συγγενέστεραι δυνάμεις ψυχρότητός εἰσι, τὸ ἐμβριθὲς τὸ μόνιμον τὸ πυκνὸν τὸ ἀμετάβλητον· ὧν ἀέρι μὲν οὐδεμιᾶς, γῇ δὲ μᾶλλον ἢ ὕδατι πασῶν μέτεστι. καὶ μὴν ἐν τοῖς μάλιστα τὸ ψυχρὸν αἰσθητῶς σκληρόν ἐστι καὶ σκληροποιὸν καὶ ἀντίτυπον. ἰχθῦς μὲν γὰρ ἱστορεῖ Θεόφραστος ὑπὸ ῥίγους πεπηγότας, ἂν ἀφεθῶσιν ἐπὶ τὴν γῆν, κατάγνυσθαι καὶ συντρίβεσθαι δίκην ὑελῶν[1] ἢ κεραμεῶν σωμά-
D των. ἐν δὲ Δελφοῖς αὐτὸς ἤκουες ὅτι τῶν εἰς τὸν Παρνασὸν ἀναβάντων βοηθῆσαι ταῖς Θυιάσιν,[2] ἀπειλημμέναις ὑπὸ πνεύματος χαλεποῦ καὶ χιόνος, οὕτως ἐγένοντο διὰ τὸν πάγον σκληραὶ καὶ ξυλώδεις αἱ χλαμύδες, ὡς καὶ θραύεσθαι διατεινομένας καὶ ῥήγνυσθαι. ποιεῖ δὲ καὶ νεῦρα δυσκαμπῆ καὶ γλῶτταν ἄναυδον ἀκινησίᾳ καὶ σκληρότητι τὸ ἄγαν ψῦχος, ἐκπηγνύον τὰ[3] ὑγρὰ καὶ μαλακὰ τοῦ σώματος.

[1] ὑελῶν van Herwerden : ὑέλων.
[2] Θυιάσιν Bernardakis : θυάσιν. [3] τὰ] most mss. have καί.

that the earth is called black by the poets,[a] whenever they have occasion to do so, because of its murky and lightless characteristics. The result, then, of these considerations is that the much-prized antithesis of light and darkness belongs to earth rather than to air.

18. This, however, has no relevance to the question under discussion ; for it has been shown that there are many cold objects which are bright and many hot which are dull and dark. Yet there are qualities more closely connected that belong to coldness : heaviness, stability, solidity, and resistance to change. Air has no part at all in them, while earth has a greater share in all of them than water has. Cold, moreover, is perceptibly one of the hardest of things and it makes things hard and unyielding. Theophrastus,[b] for instance, tells us that when frozen fish are dropped on the ground, they are broken and smashed to bits just like objects of glass or earthenware. And at Delphi you yourself heard, in the case of those who climbed Parnassus to rescue the Thyiades [c] when they were trapped by a fierce gale and snowstorm, that their capes were frozen so stiff and wooden that when they were opened out, they broke and split apart. Excessive cold, because of its hardness and immobility, also stiffens the muscles and renders the tongue speechless, for it congeals the moist and tender parts of the body.

[a] *e.g.* Homer, *Iliad*, ii. 699 ; Alcman, 36 (Edmonds, *Lyra Graeca*, i, p. 76 ; Diehl, *Anthologia Lyrica Graeca*, ii. 27) ; Sappho, 38 (Edmonds, *op. cit.* i, p. 208).

[b] Frag. 184 Wimmer.

[c] The Thyiades were Attic women, devotees of Dionysus, who went every other year to Delphi to join in the midwinter festival. (See Guthrie, *The Greeks and their Gods*, p. 178.) The rites must have involved considerable discomfort and even risk, as Dodds says (edition of Euripides, *Bacchae*, p. xi).

(953) 19. Ὧν βλεπομένων, σκόπει τὸ γινόμενον οὕτω. πᾶσα δήπου δύναμις, ἂν περιγένηται, πέφυκε μεταβάλλειν καὶ τρέπειν εἰς ἑαυτὴν τὸ νικώμενον· τὸ μὲν γὰρ ὑπὸ θερμοῦ κρατηθὲν ἐκπυροῦται, τὸ δ' ὑπὸ πνεύματος ἐξαεροῦται, τὸ δ' εἰς ὕδωρ ἐμπεσόν,
E ἂν μὴ διαφύγῃ, καθυγραίνεται συνδιαχεόμενον. ἀνάγκη δὴ καὶ τὰ ψυχόμενα κομιδῇ μεταβάλλειν εἰς τὸ πρώτως ψυχρόν· ἔστι δ' ὑπερβολὴ ψύξεως πῆξις, πῆξις δ' εἰς ἀλλοίωσιν τελευτᾷ καὶ λίθωσιν, ὅταν, παντάπασι τοῦ ψυχροῦ κρατήσαντος, ἐκπαγῇ μὲν τὸ ὑγρὸν ἐκθλιβῇ δὲ τὸ θερμόν. ὅθεν ἡ μὲν ἐν βάθει γῆ πάγος ἐστὶν ὡς εἰπεῖν καὶ κρύσταλλος ἅπασα· τὸ γὰρ ψυχρὸν ἄκρατον οἰκουρεῖ καὶ ἀμάλακτον ἀπεωσμένον ἐκεῖ τοῦ αἰθέρος ἀπωτάτω· ταυτὶ δὲ τὰ ἐμφανῆ, κρημνοὺς καὶ σκοπέλους καὶ πέτρας, Ἐμπεδοκλῆς μὲν ὑπὸ τοῦ πυρὸς οἴεται τοῦ ἐν βάθει τῆς γῆς ἑστάναι καὶ ἀνέχεσθαι διερειδόμενα φλεγ-
F μαίνοντος· ἐμφαίνεται δὲ μᾶλλον, ὅσων τὸ θερμὸν ἐξεθλίβη καὶ διέπτατο, πάντα ταῦτα παντάπασιν ὑπὸ τῆς ψυχρότητος παγῆναι· διὸ καὶ πάγοι καλοῦνται. καὶ τὰ ἄκρα πολλῶν ἐπιμελανθέντα,[1] ᾗ τὸ θερμὸν ἐξέπεσε, πυρικαύστοις ἰδεῖν προσέοικε· πήγνυσι γὰρ τὸ ψυχρὸν τὰ μὲν μᾶλλον τὰ δ' ἧττον,
954 μάλιστα δ' οἷς πρώτως ἐνυπάρχειν πέφυκεν. ὥσπερ

[1] ἐπιμελανθέντα Emperius : ἐπιμελανθέντων.

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[a] See 951 D above.

[b] Diels-Kranz, *Frag. der Vorsok.*[5], i, p. 296, frag. A 69 ; *cf. Mor.* 691 B and Hubert's references *ad loc.*

[c] Crags and rocks are called *pagoi* (as the Areo-pagus,

19. In view of these considerations, regard the facts in the following light: every force, presumably, whenever it prevails, by a law of nature changes and turns into itself whatever it overcomes. What is mastered by heat is reduced to flames, what is mastered by wind turns to air; and anything that falls into the water, unless it gets out quickly, dissolves and liquefies. It follows, then, that whatever is completely frozen must turn into primordial cold. Now freezing is extreme refrigeration that terminates in a complete alteration and petrifaction when, since the cold has obtained complete mastery, the moist elements are frozen solid and the heat is squeezed out. This is the reason why the earth at its bottommost point is practically all solid frost and ice. For there undiluted and unmitigated cold abides at bay, thrust back to the point farthest removed from the flaming aether.[a] As for these features that are visible, cliffs and crags and rocks, Empedocles [b] thinks that they have been fixed in place and are upheld by resting on the fire that burns in the depths of the earth; but the indications are rather that all these things from which the heat was squeezed out and evaporated were completely frozen by the cold; and for this reason they are called *pagoi*.[c] So also the peaks [d] of many of them have a black crust where the heat has been expelled and have the appearance of debris from a conflagration. For the cold freezes substances to a varying degree, but hardest those of which it is naturally a primary constituent. Thus, if

" Mars Hill," at Athens), which Plutarch correctly connects with the verb meaning " freeze " or " solidify " and uses to confute Empedocles.

[d] Plutarch is speaking of volcanoes like Aetna with a lava bed on top.

(954) γάρ, εἰ θερμοῦ τὸ κουφίζειν, θερμότατόν ἐστι τὸ κουφότατον· εἰ δ' ὑγροῦ τὸ μαλάσσειν, ὑγρότατον τὸ μαλακώτατον· οὕτως, εἰ καὶ ψυχροῦ τὸ πηγνύειν, ἀνάγκη καὶ ψυχρότατον εἶναι τὸ μάλιστα πεπηγός, οἷον ἡ γῆ· τὸ δὲ ψυχρότατον φύσει δήπου καὶ πρώτως ψυχρόν· ὥστε πρώτως καὶ φύσει ψυχρὸν ἡ γῆ. τοῦτο δ' ἀμέλει καὶ τῇ αἰσθήσει δῆλόν ἐστι· καὶ γὰρ πηλὸς ὕδατος ψυχρότερον καὶ τὸ πῦρ γῆν ἐπιφοροῦντες ἀφανίζουσιν· οἱ δὲ χαλκεῖς τῷ πυρουμένῳ καὶ ἀνατηκομένῳ σιδήρῳ μάρμαρον
B καὶ λατύπην παραπάσσουσι,[1] τὴν πολλὴν ῥύσιν ἐφιστάντες καὶ καταψύχοντες· ψύχει δὲ καὶ τὰ τῶν ἀθλητῶν ἡ κόνις σώματα καὶ κατασβέννυσι τοὺς ἱδρῶτας.

20. Ἡ δὲ καθ' ἕκαστον ἐνιαυτὸν ἡμᾶς μετάγουσα καὶ μετοικίζουσα χρεία τί βούλεται, χειμῶνος μὲν ἀπωτάτω φεύγουσα τῆς γῆς εἰς μετέωρα καὶ ἀπόγεια, θέρους δὲ πάλιν ἀντεχομένη τῶν κάτω καὶ ὑποδυομένη καὶ διώκουσα προσφόρους[2] καταφυγάς, τιθεμένη δίαιταν ἐν ἀγκάλαις γῆς ἀγαπητῶς; ἆρ' οὐχὶ ταῦτα ποιοῦμεν ἐπὶ τὴν γῆν ὑπὸ ψυχρότητος ὁδηγούμενοι τῇ αἰσθήσει καὶ τὸ πρώτως φύσει ψυχρὸν ἐπιγινώσκοντες; αἱ γοῦν παράλιοι χειμῶνος δίαιται τρόπον τινὰ γῆς φυγαί εἰσιν, ὡς
C ἀνυστὸν ἀπολειπόντων διὰ κρύος αὐτήν, τὸν δ' ἔναλον ἀέρα καὶ πελάγιον θερμὸν ὄντα περιβαλλομένων[3]· εἶτ' αὖθις ἐν θέρει τὸν γηγενῆ καὶ χερσαῖον ὑπὸ καύματος ποθοῦμεν, οὐκ αὐτὸν ὄντα

it is the nature of heat to lighten, the lightest object will have most heat, and if it is the nature of humidity to soften, the softest will have the most humidity; so, if it is also true that the nature of cold is to harden, then it must also follow that the hardest object will have the most cold—that is to say, just as the earth has. But what is coldest by nature is surely also primarily cold, so that the earth is in fact cold both primordially and naturally; and, of course, this is obvious even to the senses. Mud, in fact, is a colder thing than water; and men extinguish a fire by dumping earth upon it. Blacksmiths, when their iron becomes fiery and begins to melt, sprinkle on it marble chips and gypsum to check and cool it off before it melts too much. It is also true that dust cools the bodies of athletes and dries up their sweat.

20. And what is the meaning of our demand for a yearly change of habitation? In winter we retreat to the loftiest parts of our houses, those farthest from the earth, while in summer we require the lower parts, submerging ourselves and going in quest of comfortable retreats, as we make the best of a life in the embrace of mother earth. Since we do this, are we not guided to the earth by our perception of its coldness? Do we not acknowledge it as the natural seat of primordial cold? And surely our living by the sea in the winter is, in a way, an escape from the earth, since we abandon the land as far as possible because of the frost and wrap ourselves in salt sea air because it is warm. Then again, in the summer by reason of the heat, we long for the earth-born, upland air, not

[1] περιπάσσουσι van Herwerden.
[2] προσφόρους] προσγείους Patzig.
[3] περιβαλλομένων Wyttenbach: περιβάλλομεν.

(954) ψυχρὸν ἀλλὰ τοῦ φύσει ψυχροῦ καὶ πρώτως ἀποβλαστάνοντα καὶ βεβαμμένον ὑπὸ τῆς ἐν γῇ δυνάμεως ὥσπερ βαφῇ σίδηρον. καὶ γὰρ τῶν ῥυτῶν ὑδάτων τὰ πετραῖα καὶ ὀρεινὰ ψυχρότατα καὶ τῶν φρεατιαίων τὰ κοιλότατα· τούτοις μὲν γὰρ οὐκέτι μείγνυται διὰ βάθους ἔξωθεν ὁ ἀήρ, ἐκεῖνα δ' ἐκπίπτει διὰ τῆς γῆς ἀμίκτου καὶ καθαρᾶς, ὡς τὸ
D περὶ Ταίναρον,[1] ὃ δὴ Στυγὸς ὕδωρ καλοῦσιν, ἐκ πέτρας γλίσχρως συλλειβόμενον οὕτω ψυχρόν, ὥστε μηδὲν ἀγγεῖον ἄλλο μόνην δ' ὁπλὴν ὄνου στέγειν· τὰ δ' ἄλλα διακόπτει καὶ ῥήγνυσιν.

21. Ἔτι γε μὴν τῶν ἰατρῶν ἀκούομεν, ὡς πᾶσα γῆ τῷ γένει στύφειν καὶ ψύχειν πέφυκε· καὶ πολλὰ τῶν μεταλλευομένων καταριθμοῦσι στυπτικὴν αὐτοῖς παρέχοντα καὶ σχετικὴν εἰς τὰς φαρμακείας δύναμιν· καὶ γὰρ τὸ στοιχεῖον αὐτῆς οὐ τμητικὸν οὐδὲ κινητικὸν οὐδὲ λεπτὸν[2] οὐδ' ἔχον ὀξύτητας οὐδὲ μαλθακὸν οὐδ' εὐπερίχυτον γέγονεν, ἀλλ'
E ἑδραῖον ὡς ὁ κύβος καὶ συνερειστικόν. ὅθεν αὐτή τε βρῖθος ἔσχε, καὶ τὸ ψυχρόν, ὅπερ ἦν δύναμις αὐτῆς, τῷ πυκνοῦν καὶ συνωθεῖν καὶ ἀποθλίβειν τὰ ὑγρὰ φρίκας καὶ τρόμους διὰ τὴν ἀνωμαλίαν ἐνεργάζεται τοῖς σώμασιν· ἂν δ' ἐπικρατήσῃ παντάπασι, τοῦ θερμοῦ φυγόντος ἢ σβεσθέντος, ἔστησε τὴν ἕξιν ἐκπαγεῖσαν καὶ νεκρωθεῖσαν. ὅθεν οὐδὲ καίεται γῆ τὸ παράπαν ἢ καίεται γλίσχρως καὶ

[1] τὸ περὶ Ταίναρον Wyttenbach: περιττοτέρων or περὶ τὸ Ταίναρον (τὸ περὶ Νώνακριν Emperius).
[2] λεπτὸν Turnebus: λεῖπον or λίπον.

because it is itself chilly, but because it has sprung from the naturally and primordially cold and has been imbued with its earthy power, as steel is tempered by being plunged in water.[a] And of flowing waters, also, the coldest are those that fall from rocks or mountains, and of well waters the deepest are the coldest; the air from outside does not, in the case of these wells, affect the water, so deep are they, while any such streams burst forth through pure unmixed earth, like the one at Taenarum,[b] which they call the water of Styx: it flows from the rock in a trickle, but so cold that no vessel except an ass's hoof can contain it—all others it bursts and breaks apart.

21. We are, further, informed by physicians that generically earth is by nature astringent and cold, and they enumerate many metals that provide a styptic, staying effect for medicinal use. The element of earth is not sharp or mobile or slender or prickly or soft or ductile, but solid and compact like a cube.[c] This is how it came to have weight; and the cold, which is its true power, by thickening, compressing, and squeezing out the humidity of bodies, induces shivering and shaking through its inequality[d]; and if it becomes complete master and expels or extinguishes all the heat, it fixes the body in a frozen and corpselike condition. This is the reason why earth does not burn at all, or burns only grudgingly

[a] *Cf. Mor.* 433 A and 946 C *supra.*

[b] Plutarch knew that the mouth of Hades was at Taenarum (Pindar, *Pythian*, iv. 44) and transferred the Styx to that place. For its water see Frazer on Pausanias, viii. 18. 4. According to Antigonus, *Hist. Mirab.* 158 (ed. Keller) no receptacle except one of horn can contain the water; he adds, "All that taste of it die."

[c] *Cf. Mor.* 288 E and Plato, *Timaeus*, 55 D-E.

[d] *Cf.* 948 B *supra.*

(954) μόγις. ἀὴρ μὲν γὰρ ἐξ ἑαυτοῦ πολλάκις φλόγας ἀναδίδωσι καὶ ῥεῖ[1] καὶ διαστράπτει πυρούμενος[2]· τῷ δ' ὑγρῷ τροφῇ χρῆται τὸ θερμόν· οὐ γὰρ τὸ στερεὸν ἀλλὰ τὸ νοτερὸν τοῦ ξύλου καυστόν ἐστιν· F ἐξικμασθέντος[3] δὲ τούτου, τὸ στερεὸν καὶ ξηρὸν ἀπολείπεται τέφρα γενόμενον. οἱ δὲ καὶ τοῦτο φιλοτιμούμενοι μεταβάλλον ἀποδεῖξαι καὶ καταναλισκόμενον ἀναδεύοντες πολλάκις ἐλαίῳ καὶ στέατι φύροντες οὐδὲν περαίνουσιν, ἀλλ' ὅταν ἐκκαῇ τὸ λιπαρόν, περίεστι πάντως καὶ διαμένει τὸ γεῶδες· ὅθεν οὐ κατὰ χώραν μόνον ἐξ ἕδρας ἀκίνητον οὖσαν αὐτὴν ἀλλὰ καὶ κατ' οὐσίαν ἀμετάβλητον, Ἑστίαν, ἅτε δὴ[4] "μένουσαν ἐν θεῶν οἴκῳ," κάλλιστα[5] προσηγόρευσαν οἱ παλαιοί, διὰ τὴν στάσιν καὶ πῆξιν· ἧς ἡ ψυχρότης δεσμός ἐστιν, ὡς Ἀρχέλαος ὁ φυσικὸς εἶπεν, οὐδενὸς χαλῶντος αὐτὴν οὐδὲ μαλάττοντος, ἅτε θερομένην καὶ ἀλεαινομένην οὐσίαν.[6]

955 Οἱ δὲ πνεύματος μὲν αἰσθάνεσθαι ψυχροῦ καὶ ὕδατος, γῆς δ' ἧττον οἰόμενοι, τὴν ἔγγιστα γῆν ὁρῶσιν ἀέρων καὶ ὑδάτων καὶ ἡλίου καὶ θερμότητος ἀνάπλεων σύμμιγμα καὶ συμφόρημα γεγενημένην· καὶ οὐδὲν διαφέρουσι τῶν μὴ τὸν αἰθέρα

[1] ῥεῖ] ζεῖ Emperius.
[2] διαστράπτει πυρούμενος Bernardakis: διαστραπτόμενος or ἀστράπτει πυρούμενος.
[3] ἐξικμασθέντος Turnebus: ἰκμασθέντος.
[4] Ἑστίαν, ἅτε δὴ Turnebus: ἔστιν ὅτε δὲ.
[5] κάλλιστα Post (who also suggests ἰσαίτατα): κλίτα; δικαιότατα W. C. H.
[6] οὐσίαν Post and Sandbach: οὖσαν (deleted by Wyttenbach: ἠρεμοῦσαν Crönert).

and with difficulty. Air, on the other hand, often shoots forth flames from itself and, turning into fire, makes streams and flashes of lightning. Heat feeds on moisture,[a] for it is not the solid part of wood, but the damp part, that is combustible ; and when this is distilled, the solid, dry part remains behind, reduced to ashes.[b] Those who emulously strive to prove that this too is changed and consumed, sprinkling it, perhaps, with oil or kneading it with suet and setting it alight, accomplish nothing ; for when the oily part is consumed, the earthy remains as a permanent residue, do what they may. Not only, therefore, because the earth is physically immovable from its station, but also because it is unalterable in essence, it was quite appropriately called Hestia [c] by the ancients—in as much as she "remains in the home of the gods"—because of its stationary and compact nature ; and coldness is what binds it together, as Archelaüs [d] the natural philosopher declared, since nothing can relax or soften it, as a substance that is subject to heating or warming might be loosened.

As for those who suppose that they feel cold air and water, but are less sensible of earth's coldness, what they perceive is that portion of earth which is closest to them and has come to be a medley, a congeries, abounding in air and water, sun and heat. There is no difference between such people and those who

[a] *Cf. Mor.* 649 B, 687 A, 696 B ; Aristotle, *Metaphysics*, A 3 (983 b 23 ff.) ; Pseudo-Aristotle, *Problemata*, 949 b 29.

[b] *Cf. Mor.* 696 B.

[c] *Cf.* Plato, *Phaedrus*, 247 A and 948 B *supra* with the note. For earth as Hestia see also Dio Chrys. xxxvi. 46 (L.C.L.) with Crosby's note ; Dion. Hal. ii. 66. 3 ; Ovid, *Fasti*, vi. 267 ; Koster, *Mnemosyne*, Suppl. iii (1951), p. 7, n. 6.

[d] Diels-Kranz, *Frag. der Vorsok.*[5], ii, p. 48.

(955) φύσει καὶ πρώτως θερμὸν ἀλλὰ τὸ ζέον ὕδωρ ἢ τὸν διάπυρον σίδηρον ἀποφαινομένων, ὅτι τούτων μὲν ἅπτονται καὶ προσθιγγάνουσι,[1] τοῦ δὲ πρώτου καθαροῦ καὶ οὐρανίου πυρὸς αἴσθησιν δι' ἀφῆς οὐ λαμβάνουσιν, ὥσπερ οὐδ' οὗτοι τῆς ἐν βάθει γῆς, ἣν μάλιστα γῆν ἄν τις νοήσειεν αὐτὴν καθ' αὑτὴν ἀποκεκριμένην τῶν ἄλλων. δεῖγμα δ' αὐτῆς ἐστι
B κἀνταῦθα περὶ τὰς πέτρας· πολὺ γὰρ ἐκ βάθους καὶ οὐ ῥᾴδιον ἀνασχέσθαι προσβάλλουσι[2] κρύος. οἱ δὲ ψυχροτέρου ποτοῦ δεόμενοι χάλικας ἐμβάλλουσιν εἰς τὸ ὕδωρ· γίνεται γὰρ οὐλότερον καὶ στομοῦται παρὰ τὴν ἀπὸ τῶν λίθων ψυχρότητα, πρόσφατον καὶ ἄκρατον ἀναφερομένην.

22. Τοὺς οὖν πάλαι σοφοὺς καὶ λογίους ἄμικτα θέσθαι τὰ ἐπίγεια καὶ τὰ οὐράνια χρὴ νομίζειν, οὐ τοῖς τόποις ὥσπερ ἐπὶ ζυγοῦ πρὸς τὰ κάτω καὶ ἄνω βλέποντας, ἀλλὰ τῇ διαφορᾷ τῶν δυνάμεων τὰ μὲν θερμὰ καὶ λαμπρὰ καὶ ταχέα καὶ κοῦφα τῇ ἀθανάτῳ καὶ ἀιδίῳ φύσει προσνέμοντας, τὰ δὲ σκοτεινὰ καὶ ψυχρὰ καὶ βραδέα φθιτῶν καὶ ἐνέρων οὐκ εὐδαίμονα κλῆρον ἀποφαίνοντας.[3] ἐπεὶ καὶ τὸ
C σῶμα τοῦ ζῴου, μέχρι μὲν ἔμπνουν ἐστὶ καὶ θαλερόν, ὡς οἱ ποιηταὶ λέγουσι, θερμότητι χρῆται καὶ ζωῇ· γενόμενον δὲ τούτων ἔρημον καὶ ἀπολειφθὲν ἐν μόνῃ τῇ τῆς γῆς μοίρᾳ ψυχρότης εὐθὺς ἴσχει καὶ

[1] προσθιγγάνουσι Meziriacus : προστυγχάνουσι.
[2] προσβάλλουσι Turnebus : προβάλλουσι.
[3] ἀποφαίνοντας B, as Kronenberg had conjectured : ἀποφήναντας.

declare that the aether [a] is not naturally and primordially hot, but rather that scalding water or red hot iron are—because they can feel and touch these, but are unable to touch and feel the primordially pure and heavenly fire. Nor likewise are these persons able to touch and feel the earth at its bottommost, which is what we particularly mean by earth—earth set off alone by itself, without admixture of any other element. But we can see a sample of such earthiness in that statement about the cliffs [b] that display from deep down so intense a cold that it can scarcely be endured. Then, too, those who want a colder drink throw pebbles into the water,[c] which becomes thicker and denser through the coldness that streams upward, fresh and undiluted, from the stones.

22. We must, therefore, believe that the reason why ancient learned men held that there is no commerce between earthly and celestial things was not that they distinguished up and down by relative position, as we do in the case of scales ; but rather it was the difference in powers that led them to assign such things as are hot and bright, swift and buoyant, to the eternal and imperishable part of nature, while darkness and cold and slowness they considered the unhappy heritage of transitory and submerged beings. Then too, the body of a living creature, as long as it breathes and flourishes, does, as the poets say, enjoy both warmth and life [d] ; but when these forsake it and it is abandoned in the realm of earth alone, immediately frigidity and congelation seize upon it.

[a] *Cf.* 951 D *supra.*
[b] *Cf.* 954 C-D *supra.*
[c] *Cf. Mor.* 690 F—691 C.
[d] Perhaps some such passage as Homer, *Iliad*, xxii. 363 is meant.

(955) κρύος, ὡς ἐν παντὶ μᾶλλον ἢ τῷ γεώδει κατὰ φύσιν θερμότητος ἐνυπαρχούσης.

23. Ταῦτ', ὦ Φαβωρῖνε, τοῖς εἰρημένοις ὑφ' ἑτέρων παράβαλλε· κἂν μήτε λείπηται τῇ πιθανότητι μήθ' ὑπερέχῃ πολύ, χαίρειν ἔα τὰς δόξας, τὸ ἐπέχειν ἐν τοῖς ἀδήλοις τοῦ συγκατατίθεσθαι φιλοσοφώτερον ἡγούμενος.

[a] See the introduction to this essay.

since warmth naturally resides in anything else rather than in the earthy.

23. Compare these statements, Favorinus, with the pronouncements of others ; and if these notions of mine are neither less probable nor much more plausible than those of others, say farewell to dogma, being convinced as you are that it is more philosophic to suspend judgement when the truth is obscure than to take sides.[a]

WHETHER FIRE OR WATER IS MORE USEFUL

(AQUANE AN IGNIS UTILIOR)

INTRODUCTION

There seems to be no reason to discuss this little work in detail, since F. H. Sandbach [a] has shown conclusively that it cannot be genuine. Still more might be added to his proofs, sound and thorough as they are ; but this is not the place to slay the slain. It is the more to be regretted that Ziegler, in the article on Plutarch in Pauly-Wissowa, *Realencyclopädie*, has not had access to Sandbach's work,[b] though he does refer to Xylander's athetesis, only to reject it, and might have mentioned Meziriacus' as well.

Sandbach well observes : " To write an exercise on the comparative utility of fire and water may seem so difficult to us moderns who do not have such tasks as part of our education, that we do not recognize how badly the topic is here handled. . . . While it is possible that Plutarch wrote this work as a parody, or when a schoolboy, or under some strange circumstances, yet . . . the most probable view is that a miserable sophistical exercise on the subject *Whether fire or water is more useful* was fathered on the author of a diversion entitled *Whether land- or water-animals are more intelligent*, just as the *Consolatio ad Apollonium*

[a] *Class. Quart.* xxxiii (1939), pp. 198-202. G. Kowolski, *De Plut. scriptorum iuvenilium colore rhetorico*, Cracow, 1918, pp. 258 ff., also denied the authenticity.

[b] This is very puzzling since Ziegler later (936) cites the same article as authoritative on rhythmical matters.

was ascribed to the author of a consolation addressed to his wife, or the *Lives of the Ten Orators* to the author of some more famous biographies."

The text is extremely bad, as may be seen by examining Wegehaupt's topheavy [a] apparatus in *Χάριτες für Friedrich Leo* (Berlin, Weidmann, 1911), pp. 158-169. It is possible, to be sure, that part at least of the difficulty of the text is due to the author. Less emendation than that admitted here might not seriously damage what is irreparable nonsense in any case. Some attempt has been made to reproduce the childish style of the original.

The work is no. 206 in the catalogue of Lamprias.[b]

[a] Wegehaupt collated some 34 MSS. for his edition, all of which he cites separately.

[b] The new Teubner edition of this and the following essays appeared while this volume was in proof, so that only the most necessary changes and corrections could be made. In this essay (since Wegehaupt's edition was already available) they have not been so plentiful as in the subsequent ones, for which Hubert has now provided the first truly critical edition that these works have ever had.

(955) ΠΕΡΙ ΤΟΥ ΠΟΤΕΡΟΝ ΥΔΩΡ Η ΠΥΡ ΧΡΗΣΙΜΩΤΕΡΟΝ

D 1. "Ἄριστον μὲν ὕδωρ, ὁ δὲ χρυσὸς αἰθόμενον πῦρ"

E φησὶν ὁ Πίνδαρος· ὥσθ' οὗτος μὲν δευτέραν ἄντικρυς τῷ πυρὶ χώραν ἔδωκε· συμφωνεῖ δὲ καὶ Ἡσίοδος εἰπὼν

"ἤτοι μὲν πρώτιστα χάος γένετο"·

τοῖς πλείστοις γὰρ ὠνομακέναι δοκεῖ τὸ ὕδωρ τοῦτον τὸν τρόπον παρὰ τὴν χύσιν. ἀλλὰ τὸ μὲν τῶν μαρτύρων ἑκατέροις[1] ἴσον· ἐπεὶ καὶ τὸ πῦρ εἰσιν οἱ τοῦ παντὸς ἀρχὴν ἀποφαινόμενοι καὶ οἷον σπέρμα τοῦτ' ἐξ ἑαυτοῦ τε πάντα ποιεῖν καὶ εἰς ἑαυτὸ ἐκλαμβάνειν κατὰ τὴν ἐκπύρωσιν. ἀφέμενοι δὲ τῶν ἀνδρῶν, σκεψώμεθα τοὺς εἰς ἑκάτερον λόγους πῇ μᾶλλον ἄγουσιν ἡμᾶς.

2. Ἆρ' οὖν οὐ χρησιμώτερον ἐκεῖνο, οὗ πάντοτε F καὶ διηνεκῶς δεόμεθα καὶ πλείστου, καθάπερ ἐργαλεῖον καὶ ὄργανον καὶ νὴ Δία φίλος ὁ πάσης ὥρας καὶ παντὸς καιροῦ παρὼν ἕτοιμος; καὶ μὴν τὸ μὲν

[1] ἑκατέροις Bernardakis: ἑκάτερος or -ον.

[a] *Olympians*, i. 1. [b] *Theogony*, 116.

WHETHER FIRE OR WATER IS MORE USEFUL

1. Water is best, but gold is a flaming fire,

says Pindar.[a] He, therefore, bluntly assigns the second place to fire; and Hesiod[b] agrees with him in the words

And first of all came Chaos into being;

for most people believe that this is his name for water because it flows (*chysis*).[c] Yet the balance of witnesses on both sides seems to be equal. There are, in fact, some[d] who state that fire is the first principle of the universe and, like a seed, creates everything out of itself and receives all things into itself when the conflagration occurs.[e] Ignoring the authors, let us examine the arguments on both sides and see where they will lead us.

2. Is not that element the more useful of which most of all, everywhere, invariably, we stand in need as a household tool and, I swear, a friend, ready to help us at any time, in any emergency? Yet fire is

[c] Etymologizing (as in Mor. 948 E-F *supra*) *chaos* from *chysis*, "diffusion of liquid."

[d] The Stoics: *cf.*, *e.g.*, von Arnim, *S.V.F.* i, p. 27 (Zeno, frag. 98); *cf. Mor.* 1053 A-B; 1067 A; 1077 B.

[e] On the Universal Conflagration of the Stoics see von Arnim, *op. cit.* ii, pp. 183 ff.; on that of Heraclitus, Cherniss, *Aristotle's Criticism of the Presocratics*, p. 29, n. 108.

(955) πῦρ οὐ πάντοτε χρήσιμον, ἔστι δ' ὅτε καὶ βαρυνόμεθα καὶ ἀποσπώμεθα· τοῦ δ' ὕδατος χρεία καὶ χειμῶνος καὶ θέρους καὶ νοσοῦσι καὶ ὑγιαίνουσι,
956 νυκτὸς καὶ μεθ' ἡμέραν· καὶ οὐκ ἔστιν ὅτ' ἄνθρωπος οὐ δεῖται. ἀμέλει τοὺς ἀποθανόντας "ἀλίβαντας" καλοῦσιν ὡς ἐνδεεῖς "λιβάδος," τουτέστιν ὑγρότητος, καὶ παρὰ τοῦτο στερουμένους τοῦ ζῆν. καὶ ἄνευ μὲν πυρὸς ἦν πολλάκις,[1] ὕδατος δ' οὐδέποτ' ἄνθρωπος. ἔτι δὲ τὸ ἐξ ἀρχῆς καὶ ἅμα τῇ πρώτῃ καταβολῇ τῶν ἀνθρώπων χρησιμώτερον τοῦ ὕστερον εὑρεθέντος· δῆλον γὰρ ὡς τὸ μὲν ὄντως[2] ἀναγκαῖον ἡ φύσις ἔδωκε· τὸ δὲ περιουσίᾳ τῆς χρήσεως τύχη[3] καὶ μηχανή τις εὗρεν. ὕδωρ μὲν οὖν οὐκ ἔστιν εἰπεῖν ὅτ' οὐκ ἦν ἀνθρώποις οὐδέ τις εὑρετὴς λέγεται θεῶν ἢ ἡρώων· σχεδὸν γὰρ γενομένων εὐθὺς
B ὑπῆρχε καὶ τὸ γεγενῆσθαι παρεῖχεν. ἡ δὲ πυρὸς χρῆσις ἐχθές, φασί, καὶ πρῴην ὑπὸ Προμηθέως[4] . . . βίος πυρός, οὐκ ἄνευ δ' ὕδατος ἦν. καὶ τὸ μὲν πλάσμα τοῦτο μὴ εἶναι ποιητικὸν ἀποδείκνυσιν ὁ καθ' ἡμᾶς βίος· ἔστι γὰρ ἀνθρώπων γένη τινὰ χωρὶς πυρὸς ποιούμενα τὴν δίαιταν, ἄοικα καὶ ἀνέστια καὶ ὑπαίθρια· καὶ Διογένης δ' ὁ κύων ἥκιστα προσεχρῆτο πυρί, ὥστε καὶ πολύποδα καταπιὼν ὠμόν, "οὕτως ὑπὲρ ὑμῶν," εἶπεν, "ὦ

[1] πολλάκις Post with one ms.: πολλά (πάλαι van Herwerden).
[2] ὄντως Meziriacus; οὕτως.
[3] τύχη Leonicus: μάχη (τέχνη Wyttenbach).
[4] Lacuna after Προμηθέως, indicated by Reiske, variously

not always useful; sometimes, indeed, we find it too much and interrupt our use of it. But water is used both winter and summer, sick and well, night and day: there is no time when a man does not need it. That, of course, is the reason why the dead are called *alibantes*, meaning that they are without *libas*, "moisture," [a] and for lack of that deprived of life. Man has often existed without fire, but without water never. Besides, that which, from the beginning, was coincidental with the inception of man is more useful than that which was discovered later; for it is obvious that Nature bestowed the one as vitally necessary, while the other was brought to light by luck or contrivance for a superfluous use. Now, none may tell of a time when water was unknown to man, nor is any god or hero said to be its discoverer; it was, in fact, at hand instantly when man appeared and was itself the cause of his appearance. But the use of fire, they say,[b] was discovered only a day or two ago by Prometheus; ⟨consequently all our preceding life was deprived of⟩ fire, though it was not without water. And that this is no poetic fiction is proved by present modes of living; for there are certain races of man who live without fire, with no house or hearth, under the open sky. And Diogenes [c] the Cynic reduced the use of fire to a minimum, so that he even swallowed a squid raw, remarking, "Thus, gentlemen, do I risk my life for you." But

[a] *Cf. Mor.* 736 A: Galen, *De Temperament.* i. 3 (i, p. 522 K.).

[b] As, *e.g.*, Aeschylus, *Prometheus*, 254. The following words in lozenge brackets are conjecturally supplied.

[c] This anecdote is told with rather more point and relevance in 995 C-D *infra*.

supplied. The required sense is given by Post's supplement ⟨ἐδόθη ὥστ' ἐστερημένος ἡμῖν ἦν πᾶς ὁ τέως⟩.

(956) ἄνδρες, παραβάλλομαι." χωρὶς δ' ὕδατος οὔτε καλόν τις ἐνόμισε ζῆν οὔτε δυνατόν.

3. Καὶ τί μικρολογοῦμαι τὴν τῶν ἀνθρώπων ἐπερχόμενος φύσιν; πολλῶν γὰρ ὄντων,[1] μᾶλλον δ' C ἀπείρων γενῶν, τὸ τῶν ἀνθρώπων σχεδὸν μόνον οἶδε πυρὸς χρῆσιν, τὰ δὲ λοιπὰ ἀπύροις χρῆται διαίταις καὶ τροφαῖς, καὶ βίος αὐτοῖς νεμομένοις, ἱπταμένοις, ἕρπουσιν, ἀπὸ ῥιζῶν καὶ καρπῶν καὶ σαρκῶν ἄνευ πυρός· ὕδατος δὲ χωρὶς οὐκ ἔναλον οὐδὲν[2] οὐδὲ χερσαῖον οὐδ' αἰθέριον· καὶ γὰρ τὰ σαρκοβόρα τῶν ζῴων, ὧν ἔνιά φησι μὴ πίνειν Ἀριστοτέλης, τῷ γ' ἐντὸς[3] ὑγρῷ χρώμενα διαζῇ. τοῦτ' οὖν χρησιμώτερον, οὗ μηδεμία ζωῆς φύσις ἄνευ ἵσταται καὶ διαμένει.

4. Μετίωμεν ἀπὸ τῶν χρωμένων ἐπὶ ταῦθ' οἷς χρώμεθα, φυτὰ καὶ καρπούς. τούτων ἃ μὲν οὐδ' ὅλως θερμοῦ μετείληφεν, ἃ δ' ἥκιστα καὶ ἀδήλως· ἡ δ' ὑγρὰ φύσις βλαστάνοντα πάντα παρέχεται, D αὐξανόμενα καὶ καρποφοροῦντα· καὶ τί με δεῖ καταριθμεῖσθαι μέλι[4] καὶ οἶνον καὶ ἔλαιον καὶ τὰ λοιπὰ ὅσα τρυγῶμεν καὶ ἀμέλγομεν καὶ βλίττομεν[5] ἐν φανερῷ κείμενα, ὅπου γε καὶ ὁ πυρός, δοκῶν εἶναι τῆς ξηρᾶς τροφῆς, μεταβολῇ καὶ σήψει καὶ διαχύσει τοῦ ὑγροῦ γίνεται;

5. Καὶ μὴν καὶ χρησιμώτερον ὃ μηδέποτε βλά-

[1] γὰρ ὄντων Meziriacus : παρόντων.
[2] οὐδὲν added by Bernardakis.
[3] γ' ἐντὸς Amyot : ὄντως or ὄντων.
[4] μέλι Wegehaupt : μὲν.
[5] βλίττομεν Wyttenbach, confirmed by one ms. : βλέπομεν.

without water no one ever thought it good, or even possible, to live.

3. And why do I split hairs by discussing merely human nature? For though there are many, or rather countless, sorts of creatures, man is practically the only one that knows the use of fire, while all the others live and feed without it: they subsist, whether they range abroad or fly or crawl, upon roots or produce or flesh, all without fire; but without water no creature of the sea or land or air ever existed. For even flesh-eating animals, some of which Aristotle [a] says do not drink, nevertheless keep alive by using the fluids in the flesh. That element, therefore, without which no living nature can subsist or endure is the more useful.

4. Let us pass from the people who use fire to the things that we use, namely plants and produce,[b] of which some are completely devoid of heat, while others have an infinitesimal and uncertain amount. Moisture, however, is the element in nature that makes them all burgeon, growing and bearing fruit. And why should I enumerate honey and wine and oil and all the rest that come to us from the vintage, the milking of herds, or taking off of honey—and it is obvious where they belong [c]—when even wheat itself, though it is classed as a dry food, moves into the category of liquids by alteration, fermentation, and deliquescence? [d]

5. Moreover, what is never detrimental is more

[a] *Historia Animal.* viii. 3 (601 b).

[b] "This must be one of the most remarkable transitions in literature" (Sandbach, *op. cit.* p. 200).

[c] That is, they must be classed as liquids.

[d] *Cf.* 968 A *infra*: here, however, the author seems to be talking about beer.

(956) πτει. πῦρ μὲν οὖν ῥέον[1] ὀλεθριώτατον, ἡ δ' ὕδατος φύσις οὐδέποτε βλαβερά. καὶ μὴν δυεῖν ὠφελιμώτερον τὸ εὐτελέστερον καὶ χωρίς τινος παρασκευῆς τὴν ἐξ αὑτοῦ παρέχον ὠφέλειαν· ἡ μὲν οὖν ἀπὸ
E τοῦ πυρὸς χορηγίας δεῖται καὶ ὕλης· διὰ τοῦτο μετέχουσιν αὐτοῦ πλέον πλούσιοι πενήτων, βασιλεῖς ἰδιωτῶν· τὸ δ' ὕδωρ καὶ τοῦτ' ἔχει φιλάνθρωπον, τὴν ἰσότητα, τὸ ὅμοιον· οὐ δεῖται γὰρ ὀργάνων οὐδ' ἐργαλείων, ἀπροσδεές, αὐτοτελὲς ἀγαθόν.

6. Ἔτι μήν, ὃ πολλαπλασιαζόμενον[2] τὴν ὠφέλειαν ἀπόλλυσιν, ἀχρηστότερον· τοιοῦτον δὲ τὸ πῦρ, οἷον θηρίον παμφάγον καὶ δαπανῶν τῶν παρακειμένων, καὶ μεθόδῳ καὶ τέχνῃ μᾶλλον καὶ μετριότητι ἢ[3] τῇ αὑτοῦ φύσει ὠφέλιμον· τὸ δ' ὕδωρ οὐδέποτε φοβεόν. καὶ μὴν δυεῖν τὸ μετὰ τοῦ ἑτέρου χρησιμώτερον· πῦρ μὲν οὖν οὐκ ἐπιδέχεται τὸ ὑγρὸν οὐδὲ
F τῇ δι' αὑτοῦ κοινωνίᾳ χρήσιμον, ὕδωρ δ' ἐστὶ μετὰ πυρὸς ὠφέλιμον· τὰ γοῦν θερμὰ τῶν ὑδάτων ἀκέσιμα καὶ πρὸς θεραπείαν εὐδιάθετα.[4] καὶ πῦρ μὲν ὑγρὸν οὐκ ἄν τις εὕροι, ὕδωρ δ' ὡς ψυχρὸν οὕτω καὶ θερμὸν ὠφέλιμον ἀνθρώπῳ.

7. Καὶ μήν, τεττάρων ὄντων τῶν στοιχείων, τὸ ὕδωρ ἐξ ἑαυτοῦ πέμπτον, ὡς ἄν τις εἴποι, πεποίηκε
957 στοιχεῖον τὴν θάλασσαν, οὐδὲν ἧττον ἐκείνων ὠφέλιμον τῶν τ' ἄλλων ἕνεκεν καὶ μάλιστα τῆς ἐπιμιξίας· ἄγριον οὖν ἡμῶν ὄντα καὶ ἀσύμβολον τὸν βίον τοῦτο τὸ στοιχεῖον συνῆψε καὶ τέλειον ἐποίησε, διορθούμενον ταῖς παρ' ἀλλήλων ἐπικουρίαις καὶ

[1] ῥέον Meziriacus and one ms. ; ῥᾴδιον or ῥᾷον.
[2] πολλαπλασιαζόμενον Leonicus : πολυπλασιαζόμενον.
[3] ἢ added by Leonicus.

useful. Now fire, when it forms a stream, is most destructive ; but the nature of water is never harmful. Then again, of two elements that is more beneficial which is cheaper and provides its help without any preparation. Now the use of fire requires a supply of fuel, for which reason rich people have more of it than poor, and kings than private persons ; but water has another merit in service to man, that of equality, with no discrimination. For it needs no tools or implements, being a self-sufficient, self-fulfilling good.

6. Then too, that which by multiplication destroys its own contribution is the less useful. Such a thing is fire which, like an all-devouring beast, consumes everything near, so that it is useful rather by skilful handling and craft and moderation in use than by its own nature ; but water is never dangerous. Further, of two things the one which may be joined with its fellow is more useful. Now fire does not admit moisture and is of no use when in conjunction with it ; but water is of service when combined with fire, for hot water is healing and well adapted to medicinal purposes. A watery fire you will never see ; but water is as useful to mankind when hot as when cold.

7. Furthermore, though there are but four elements,[a] water provides from itself a fifth, so to say, the sea, one no less beneficial than the others, especially for commerce among other things. This element, therefore, when our life was savage and unsociable, linked it together and made it complete, redressing defects by mutual assistance and exchange and so

[a] *Cf. Mor.* 948 D above ; in 729 B the sea is called the "naturally hostile element."

[4] εὐδιάθετα Wyttenbach : εὐαίσθητα or ἀναίσθητα.

(957) ἀντιδόσεσι, κοινωνίαν δ' ἐργαζόμενον καὶ φιλίαν. Ἡράκλειτος μὲν οὖν, "εἰ μὴ ἥλιος," φησίν, "ἦν, εὐφρόνη ἂν ἦν"· ἔστι δ' εἰπεῖν, ὡς, εἰ μὴ θάλαττα ἦν, πάντων ἂν[1] ἀγριώτατον ζῷον καὶ ἐνδεέστατον[2] ὁ ἄνθρωπος ἦν. νυνὶ δὲ τοῦτο μὲν παρ' Ἰνδῶν ἄμπελον τοῖς Ἕλλησιν, ἐκ δὲ τῆς Ἑλλάδος καρπῶν χρῆσιν τοῖς ἐπέκεινα τῆς[3] θαλάσσης ἔδωκεν, ἐκ Φοι-
B νίκης δὲ γράμματα μνημόσυνα λήθης ἐκόμισεν, καὶ[4] ἄοινον καὶ ἄκαρπον καὶ ἀπαίδευτον ἐκώλυσεν εἶναι τὸ πλεῖστον ἀνθρώπων γένος. πῶς οὖν οὐ χρησιμώτερον ὕδωρ στοιχείῳ[5] περιττεῦον;

8. Τί[6] πρὸς τοὐναντίον ἄν τις ἐντεῦθεν ἔχων λέγοι; διότι τέτταρα μὲν στοιχεῖα θεῷ καθάπερ τεχνίτῃ πρὸς τὴν τῶν ὅλων ἐργασίαν ὑποκείμενα, τούτων δ' αὖ πάλιν ἐν[7] ἀλλήλοις διαφορὰ ἁπλῆ[8]· γῆ μὲν καὶ ὕδωρ ὑποβέβληται δίκην ὕλης ποιούμενα καὶ πλαττόμενα καὶ μετέχοντα κόσμου καὶ τάξεως καὶ τοῦ φύειν γε[9] καὶ γεννᾶν, ὅσον ἂν μεταλάβῃ παρ' ἑτέρων, πνεύματος καὶ πυρὸς[10]
C ποιούντων καὶ δημιουργούντων καὶ κείμενα νεκρὰ τέως ἐπὶ τὴν γένεσιν ἀνιστάντων· τῶν δὲ δυεῖν τούτων αὖθις τὸ πῦρ ἄρχει καὶ ἡγεμονεύει. δῆλον δ' ἐκ τῆς ἐπαγωγῆς· γῆ τε γὰρ ἄνευ θερμῆς οὐσίας

[1] ἂν added by Bernardakis.
[2] ἐνδεέστατον Meziriacus : ἀναιδέστατος or -ον.
[3] τῆς Xylander : ὁ τῆς.
[4] καὶ added by Dübner.
[5] ⟨ἐνὶ⟩ στοιχείῳ ? W. C. H.
[6] τί Post : ἤ.
[7] ἐν added by van Herwerden.
[8] ἁπλῆ Post : πλὴν.
[9] γε Reiske : γε φασί.
[10] πνεύματος καὶ πυρὸς Reiske : πνεῦμα μὲν καὶ πῦρ.

[a] Diels-Kranz, *Frag. der Vorsok.* i. 173, frag. B 99. In *Mor.* 98 c a fuller and more appropriate version is given; but see now H. Fränkel, *Wege und Formen*, p. 270 and n. 1.

bringing about co-operation and friendship. Now Heraclitus[a] declares, " If there were no sun, it would be perpetual night " ; in the same way we may say that if there were no sea, man would be the most savage and destitute of all creatures. But as it is, the sea brought the Greeks the vine from India, from Greece transmitted the use of grain across the sea, from Phoenicia imported letters as a memorial against forgetfulness,[b] thus preventing the greater part of mankind from being wineless, grainless, and unlettered. How, then, should water not be more useful when it has the advantage over fire of one more element? [c]

8. What could anyone find to say on the other side from this point on? This, that God, the master workman, had as material four elements from which to construct the universe. Among these, again, there is a simple mutual distinction, namely, that earth and water are a foundation at the bottom of the universe, being, like raw material, the substance of which things are constructed and moulded, having just so much form and organization, and indeed of capacity for growth and procreation, as is imparted to them by the other elements, air and fire, which are makers and artisans and rouse them, lying lifeless as they were until then, to the act of creation. Between these two, again, fire and air, there is the distinction that fire assumes the rule and leadership. This is clear by induction[d] : earth without warmth

[b] *Cf.* Euripides, frag. 578 (p. 542 Nauck).

[c] For this delightful absurdity see Sandbach, *op. cit.* p. 199, n. 4.

[d] Possibly ; but the argument hardly demonstrates this. The text is corrupt and a different solution than that adopted here is proposed by M. Adler (*Wien. Stud.* xxxi. 308).

(957) ἄγονος καὶ ἄκαρπος· τὸ δὲ πῦρ κρατῆσαν[1] καὶ διακέαν[2] παρίστησιν εἰς τὴν γένεσιν ὀργῶσαν[3]· οὐδεμίαν γὰρ αἰτίαν εὕροι τις ἄν, δι' ἣν ἄγονοι πέτραι καὶ τὰ κατεσκληκότα τῶν ὀρῶν πλὴν[4] ὅτι πυρὸς οὐδ' ὅλως ἢ ὀλίγον μετέσχηκε.

9. Τὸ δ' ὅλον τοσοῦτον ἀπέχει πρὸς σωτηρίαν ἢ ἑτέρων γένεσιν τὸ ὕδωρ αὐτοτελὲς εἶναι, ὥστε καὶ αὐτῷ φθορὰ πυρὸς ἔνδεια· συνέχει γὰρ ἡ θερμότης ἕκαστον ἐν τῷ εἶναι καὶ ἐπὶ τῆς ἰδίας οὐσίας
D φυλάττει καθάπερ καὶ τἆλλα καὶ τὸ ὕδωρ· ἀπέχοντος δὲ καὶ ἐνδεήσαντος σήπεται καὶ θάνατος ὕδατι καὶ ὄλεθρος ἐπίλειψις θερμότητος. ἀμέλει τὰ λιμναῖα καὶ ὅσα στάσιμα τῶν ὑδάτων καί τιν'[5] ἀδιεξόδοις ἐγκαθήμενα κοιλότησι μοχθηρὰ καὶ τελευτῶντα σήπεται τῷ κινήσεως ἥκιστα μετέχειν, ἣ τὸ θερμὸν ἐν ἑκάστοις ῥιπίζουσα τηρεῖ. διόπερ[6] τὰ μάλιστα φερόμενα καὶ ῥέοντα τῶν ὑδάτων, διὰ τὴν κίνησιν συνεχομένης τῆς θερμότητος, οὕτω καὶ προσαγορεύομεν, ζῆν λέγοντες. πῶς τοίνυν δυεῖν οὐκ ὠφελιμώτερον, ὃ τῷ ἑτέρῳ τὴν αἰτίαν τοῦ εἶναι παρέσχηκε, καθάπερ τὸ πῦρ τῷ ὕδατι; καὶ
E μήν, οὗ παντάπασιν ἀπαλλαγέντος φθείρεται τὸ ζῷον, τοῦτ' ὠφελιμώτερον· δῆλον γὰρ ὡς[7] οὗ στερούμενον οὐκ ἔστιν εἶναι, τοῦτο καὶ τὴν αἰτίαν παρέσχηκεν, ὅτ' ἦν. ὑγρότης μὲν οὖν καὶ τοῖς τεθνηκόσι πάρεστι καὶ οὐκ ἐξῄρηται παντάπασιν· ἐπεὶ οὐκ ἂν ἐσήπετο τὰ νεκρὰ τῶν σωμάτων, τῆς

[1] κρατῆσαν W. C. H. (after κεκρατηκὸς Post) : ἐκραὸς, εὐκραὲς, ἐκρυὲν. [2] διακέαν Post : διαχέαν (or -ων, -ον), διαχυθὲν.

[3] ὀργῶσαν Reiske and one ms. : ὀργῶντα, ἐργῶντα, ἐνεργῶντα, and the like (Paton would add πάντα : "swell to bring forth all things"). [4] πλὴν Naber : πᾶσιν or ἤ.

[5] Some mss. have τινὰ ἐν.

is barren and unfruitful, but fire, when it takes possession and inflames, causes it to swell to the point of generation; and it is impossible to find any other reason why rocks and the bare bones of mountains are barren except that they have either no part at all, or very little share, in fire.

9. And, in general, water is so far from being self-sufficient for the preservation or generation of other things that the want of fire is water's destruction. For heat maintains everything in its proper being and keeps it in its proper substance, water itself as well as everything else. When fire withdraws and fails, water putrefies: the dearth of heat is the death and destruction of water. It is, of course, marsh waters and such as are stagnant, some too that have drained into depressions with no outlet, that are bad [a] and finally putrefy [b] because they have very little motion, which preserves everything by stirring up its heat. This is the reason why we commonly say that those waters are "living" which have most motion and the strongest current; the heat is maintained by their motion. How, then, should that not be the more useful of two things which has provided what is necessary for the other's existence, as fire does for water? And surely that is the more useful, the lack of which, if it be entirely taken away, causes the living creature to die. For it is obvious that anything without which a creature cannot live must have been a necessary cause of its existence, while it did exist. Now even corpses have moisture which does not entirely vanish; otherwise dead bodies would not

[a] That is, "salt," as, for example, the Dead Sea.
[b] *Cf. Mor.* 1129 D, 725 D; Athenaeus, 46 b-c.

[6] διόπερ Wyttenbach: περὶ. [7] ὡς Wegehaupt: ὡς τὸ.

(957) σήψεως εἰς ὑγρὸν οὐκ[1] οὔσης ἐκ ξηροῦ μεταβολῆς, μᾶλλον δ' ὑγρῶν ἐν σαρκὶ φθορᾶς. θάνατος δ' οὐκ ἄλλο τι πλὴν ἔκλειψις θερμοῦ παντελής· ψυχρότατοι τοίνυν οἱ νεκροί· καὶ τὰς ἀκμάς, εἴ τις ἐπιχειροίη,[2] τῶν ξυρῶν[3] ἀπαμβλύνουσι δι' ὑπερβολὴν ψυχρότη-
F τος. καὶ ἐν αὐτῷ δὲ τῷ ζῴῳ τὰ ἥκιστα μετέχοντα πυρὸς ἀναισθητότατα,[4] καθάπερ ὀστᾶ καὶ τρίχες καὶ τὰ πόρρωθεν ἀφεστῶτα τῆς καρδίας· σχεδὸν γὰρ[5] μείζων[6] ἐκ τῆς τοῦ πυρὸς γίνεται παρουσίας διαφορά. φυτὰ μὲν γὰρ καὶ καρποὺς οὐχ ἡ ὑγρότης ἀναδίδωσιν ἀλλ' ἡ θερμὴ ὑγρότης· ἀμέλει τὰ ψυχρὰ τῶν ὑδάτων ἧττον ἢ οὐδ' ὅλως γόνιμα. καίτοι γ' εἰ τῇ αὑτοῦ φύσει τὸ ὕδωρ καρποφόρον,
958 δεῖ[7] πάντοτε καὶ καθ' αὑτὸ ἀναφέρειν καρπούς· τὸ δὲ τοὐναντίον καὶ βλαβερόν ἐστιν.

10. Ἀπ' ἄλλης ἀρχῆς. πρὸς μὲν τὴν πυρὸς ὡς πυρὸς χρῆσιν ὕδατος οὐ προσδεόμεθα, ἀλλὰ τοὐναντίον ἐμποδὼν γίνεται· κατασβέννυσι γὰρ καὶ διαφθείρει. ὕδατος δὲ τοῖς πλείστοις χρῆσις οὐκ ἔστιν ἄνευ πυρός· θερμανθὲν γὰρ ὠφελιμώτερον, οὕτω δὲ βλαβερόν. καὶ τὴν θάλατταν ἡ θερμότης ὠφελιμωτέραν ἐποίησεν, ὡς μᾶλλον κατάθερμον[8] τῶν ὑδάτων ἐπεὶ κατ' ἄλλο[9] γε τῶν λοιπῶν οὐδὲν διέφερε. ὥστε δυεῖν ἄμεινον ὃ ἀφ' ἑαυτοῦ παρέχεται χρείαν, τοῦ ἑτέρου μὴ προσδεόμενον. ἔτι

[1] οὐκ added by Kronenberg.
[2] ἐπιχειροίη] ἐπικείροι Bernardakis.
[3] ξυρῶν Stephanus : ξηρῶν.
[4] ἀναισθητότατα Reiske : -ότερα.
[5] γὰρ W. C. H. : γὰρ ἡ πρὸς τὰ.
[6] μείζων W. C. H. : μείζω τῶν. Post would keep the text here and just above, adding φυτῶν, καρπῶν or the like.
[7] δεῖ] ἔδει Leonicus.

putrefy, since putrefaction is not a change from dry to moist, but rather a corruption of the moisture in flesh. Death, then, is nothing but the total disappearance of heat and so dead men are extremely cold; if you attack them with a razor-blade, you will blunt the edge of it through excess of cold. In the living creature itself, too, the parts that have the least heat are the least sensitive, like bones and hair and the parts that are a long way from the heart. And, in general, the presence of fire makes a greater difference [a] than that of moisture; for it is not mere moisture that produces plants and fruits, but warm moisture; cold water, of course, is either less productive or not productive at all. Yet if by its own nature water were fruitful, it would always bear fruit by itself [b]; but on the contrary it is even harmful.

10. To begin again: for the use of fire as fire we do not need water; on the contrary, it would be in our way since it extinguishes and destroys it. But in most circumstances it is impossible to use water without fire. When water is heated, it is more useful; otherwise it is harmful. And it is heat which has made the sea more beneficial, its waters being warmer, since it differs from other waters in no other respect.[c] So that of two things, that is better which of itself lends us its use without need of the other. Besides,

[a] Or adopting Schultz's (*Hermes*, xlvi. 632) emendation: "the difference between living and non-living comes from the presence of fire"; but the text is hopelessly corrupt.

[b] That is, without heat.

[c] This sentence was transferred here from the following chapter by Wegehaupt.

[8] *κατάθερμον* W. C. H.: *καταθέρει* and the like.
[9] *ἄλλο* W. C. H.: *αὐτό*.

(958) ὕδωρ μὲν μοναχῶς ὠφέλιμον κατὰ θίξιν λουσαμένοις[1] ἢ νιψαμένοις,[2] τὸ δὲ πῦρ διὰ πάσης αἰσθήσεως· καὶ γὰρ διὰ τῆς ἁφῆς καὶ πόρρωθεν ὁρώμενον, ὥστε προσεῖναι τοῖς ἄλλοις τῆς χρείας αὐτοῦ καὶ
B τὸ πολυποίκιλον.[3]

11. Τὸ γὰρ λέγειν ὡς ἔστι ποθ' ὁ ἄνθρωπος ἄνευ πυρὸς ἄτοπον[4] οὐδ' ὅλως δύναται γενέσθαι ὁ ἄνθρωπος. διαφοραὶ δ' εἰσὶν ἐν γένει καθάπερ καὶ ἐν ἄλλοις. καὶ οἱ μὴ προσδεόμενοι δὲ τοῦ ἔξωθεν πυρὸς οὐχ ὡς ἀπροσδεεῖς τοῦτο πάσχουσιν, ἀλλὰ περιουσίᾳ καὶ πλεονασμῷ τοῦ ἐν αὐτοῖς θερμοῦ· τοῦτο ῥητέον καὶ περὶ τῶν ἄλλων ζῴων, ὅσα μὴ πυρὸς δεῖται.[5] ὥστε καὶ κατὰ τοῦθ' ὑπερέχειν τὴν τοῦ πυρὸς χρείαν, ὡς εἰκός. τὸ μὲν ὕδωρ οὐδέποτε τοιοῦτον, ὥστε μὴ δεῖσθαι τῶν ἐκτός, τὸ δὲ πῦρ
C ὑπ' ἀρετῆς πολλῆς καὶ αὔταρκες. ὡς οὖν στρατηγὸς ἀμείνων ὁ παρασκευάσας τὴν πόλιν μὴ δεῖσθαι τῶν ἔξωθεν συμμάχων, οὕτω καὶ στοιχεῖον τὸ τῆς ἔξωθεν ἐπικουρίας[6] πολλάκις μὴ δεόμενον ὑπερέχον.

Καίτοι γ' εἰς τοὐναντίον λάβοι τις ἄν, τὸ χρησιμώτερον εἶναι τοῦτο, ᾧ χρώμεθα μόνοι[7] καὶ μάλιστα τὸ βέλτιον ἐκ λογισμοῦ λαβεῖν δυνάμενοι· ἐπεὶ τί λόγου χρησιμώτερον ἢ μᾶλλον ἀνθρώποις λυσιτελέστερον; ἀλλ' οὐ πάρεστι τοῖς ἀλόγοις. τί οὖν; διὰ τοῦθ' ἧττον ὠφέλιμον τὸ[8] ἐκ τῆς προνοίας τοῦ βελτίονος εὑρεθέν;

[1] λουσαμένοις] γευσαμένοις Wyttenbach.
[2] νιψαμένοις one ms. only : ἀψαμένοις.
[3] τὸ πολυποίκιλον W. C. H. : τὴν πολυτέλειαν.
[4] ἄτοπον added by Bernardakis.
[5] πυρὸς δεῖται Wyttenbach : προσδεῖται.

water is solely beneficial to the touch, when you wash or bathe in it; but fire is profitable to all the senses. It can, in fact, both be touched and seen from a distance, so that in addition to its other uses, there is also its variegated character.

11.[a] For to say that man ever exists without fire is absurd, nor can he exist at all without it; but there are differences in kind as in other things. As for men who have no need of fire from without, they have this experience not because they do not need it, but because their own heat more than suffices. This must be predicated also of other animals which do not need fire.[b] So that in this respect, too, the use of fire is probably superior. Water is never in such a condition as to need no external support, but fire is self-sufficient because of its great excellence. As, then, a general is better who manages the affairs of his city so that it needs no allies from without, so also an element is superior which does not often need external assistance.

Yet, to take the opposite point of view, that is more useful which we alone make great use of, since by the powers of our reason we are able to choose what is better. For what is more useful and more profitable to man than reason? But brute beasts do not have it. What then? Is what has been discovered by the foresight of our better part for this reason less useful?

[a] The order of the sentences in this chapter, in addition to its many other corruptions, has been badly disturbed.

[b] This clause was transferred here by the editor from 958 c *infra* at the end of the paragraph.

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[6] ἐπικουρίας W. C. H.: ἐπικουρίας παρέχον (dittography with ὑπερέχον below).

[7] μόνοι an anonymous corrector: μόνῳ (μόνοι οἱ Reiske).

[8] τὸ added by W. C. H.

(958) D 12. Ἐπεὶ δὲ κατὰ τοῦτο τοῦ λόγου γεγόναμεν, τί τέχνης τῷ βίῳ λυσιτελέστερον; τέχνας δὲ πάσας καὶ ἀνεῦρε τὸ πῦρ καὶ σῴζει· διὸ καὶ τὸν Ἥφαιστον ἀρχηγὸν αὐτῶν ποιοῦσι. καὶ μὴν ὀλίγου χρόνου καὶ βίου τοῖς ἀνθρώποις δεδομένου, ὁ μὲν Ἀρίστων φησὶν ὅτι ὁ ὕπνος οἷον τελώνης τὸ ἥμισυ ἀφαιρεῖ τούτου· ἐγὼ δ' ἂν εἴποιμ' ὅτι σκότος· ἐγρηγορέναι[1] ἂν εἴη[2] διὰ νυκτός, ἀλλ' οὐδὲν ἦν[3] ὄφελος τῆς ἐγρηγόρσεως, εἰ μὴ τὸ πῦρ τὰ τῆς ἡμέρας ἡμῖν παρεῖχεν ἀγαθά, καὶ τὴν ἡμέρας καὶ νυκτὸς ἐξῄρει διαφοράν. εἰ τοίνυν τοῦ ζῆν οὐδὲν ἀνθρώποις λυσιτελέστερον καὶ τοῦτο πολλαπλασιάζει τὸ πῦρ, πῶς οὐκ ἂν εἴη πάντων ὠφελιμώτατον;

13. Καὶ μήν, οὗ πλεῖστον[4] ἑκάστη[5] τῶν αἰσθή-
E σεων μετείληφεν, οὐκ ἂν εἴη λυσιτελέστατον; οὐχ ὁρᾷς οὖν, ὡς τῇ μὲν ὑγρᾷ φύσει οὐδεμία τῶν αἰσθήσεων κατ' αὐτὴν προσχρῆται χωρὶς πνεύματος ἢ πυρὸς ἐγκεκραμένου, τοῦ δὲ πυρὸς ἅπασα μὲν αἴσθησις, οἷον τὸ ζωτικὸν ἐνεργαζομένου, μετείληφεν, ἐξαιρέτως δ' ἡ ὄψις, ἥτις ὀξυτάτη τῶν διὰ σώματός ἐστιν αἰσθήσεων, πυρὸς ἔξαμμα οὖσα καὶ ὅτι θεῶν πίστιν παρέσχηκεν; ἔτι τε, ᾗ Πλάτων φησί, δυνάμεθα κατασχηματίζειν πρὸς τὰς τῶν ἐν οὐρανῷ κινήσεις τὴν ψυχὴν διὰ τῆς ὄψεως.

[1] ἐγρηγορέναι anonymous : ἐγρήγορεν.
[2] ἂν εἴη Post : ἀεί. [3] ἦν added by Adler.
[4] πλεῖστον Bernardakis : πλείστου.
[5] ἑκάστη Emperius : κρᾶσις τῆς.

[a] Von Arnim, *S.V.F.* i, p. 90, frag. 403 ; *cf.* Aristotle, *Nicomachean Ethics*, i. 13. 12 (1102 b 7).
[b] A very corrupt passage. Adler's reconstruction (*Wien. Stud.* xxxi. 308), with additions by Post, has been followed.
[c] *Cf.* Plato, *Phaedrus*, 250 D ; *cf.* *Mor.* 654 D-E, 681 E.

12. And since we have arrived at this point in our argument: What is more profitable to life than Art? And it was fire that discovered and still preserves all the arts. That is why they make Hephaestus the first of artificers. Man has been granted but a little time to live and, as Ariston [a] says, sleep, like a tax-collector, takes away half of that. But I would rather say that it is a question of darkness; for although a man might stay awake all night, yet no good would come of his wakefulness if fire did not give him the benefits of day and remove the difference between day and night.[b] If, then, there is nothing more advantageous to man than life and life is many times increased by fire, how should fire not be the most useful of all things?

13. And, to be sure, will not that be the most advantageous of which each of the senses has the greatest proportion? Do you not perceive, then, that there is no one of the senses which uses moisture by itself without an admixture of air or fire; and that every sense partakes of fire inasmuch as it supplies the vital energy: and especially that sight, the keenest of the physical senses,[c] is an ignited mass of fire [d] and is that which has made us believe [e] in the gods? And further, through sight, as Plato [f] says, we are able to conform our souls to the movements of the celestial bodies.

[d] *Cf.* von Arnim, *S.V.F.* ii, pp. 196, 199; but Post believes the words may mean "a chain of fire" linking the eye with its object.

[e] It is the visible heavens and their fire that make us believe by "declaring the glory" of the celestial gods. See A. S. Pease, "Caeli Enarrant," *Harvard Theological Review*, xxxiv (1941), pp. 163-200.

[f] *Timaeus*, 47 A-B.

WHETHER LAND OR SEA ANIMALS ARE CLEVERER

(DE SOLLERTIA ANIMALIUM)

INTRODUCTION

There can be little doubt that Plutarch composed this pleasant work from *commentarii* (ὑπομνήματα) derived not merely from Aristotle (mentioned specifically in 965 D and quoted often), but also from various other compendia, the remains of which are to be seen in Aelian's and Pliny's natural histories and elsewhere.[a] In fact, if one reads Plutarch and Aelian and Pliny side by side, one may acquire the impression that they had before them substantially the same sources, and that these were numerous. Where-

[a] On the sources see Ziegler's article "Plutarchos" in Pauly-Wissowa, col. 738, and, of the authorities he cites, particularly Wellmann's papers in *Hermes*, xxvi, xxvii, and li, and Max Schuster, *Untersuchungen zu Plutarchs De Sollertia Animalium* (Diss. Munich, 1917). There is also an amusing work of Philo, surviving only in an Armenian version, which is most conveniently accessible in Aucher's Latin translation in vol. 8 of the *Bibliotheca Sacra* edition (Schwickert, Leipzig, 1830): *De Ratione quam habere etiam Bruta Animalia dicebat Alexander*. In the first part of this work Alexander presents the arguments for animal intelligence, which Philo himself attempts to refute in a somewhat summary fashion at the end. The occasional parallels with Plutarch will be cited as Philo, with Aucher's section and page numbers. Antigonus of Carystus, *Historia Mirabilium*, will be cited from O. Keller's edition of the *Naturalium Rerum Scriptores Graeci* (Teubner, 1877) and Aelian's *De Natura Animalium* from R. Hercher's Teubner (not Didot) edition.

as Pliny and Aelian appear to adopt nearly everything their authorities may have offered (for they were writing factual commentaries), Plutarch, as always, selects. It is possible, in some cases, that Plutarch's MSS. (which are not good and also contain lacunae) may have been interpolated from Aelian's; and the reverse is likewise possible. This is a very difficult matter, but the hope may be entertained that some main sources of Plutarch and Aelian, if not of Pliny, and the as yet unassessed evidence of Philo, may eventually be disentangled for substantial sections, though this is not the place to attempt such a feat.

The title is not well chosen, since the victory is awarded to neither side. The real point of the dialogue seems to be, in its second as well as its first part, that all animals of whatever provenance are intelligent.[a] The occasionally bantering tone may serve to indicate that we have before us something of a school exercise from Plutarch's own academy, with perhaps the first draft of the second part composed by pupils.[b] Note the carefully established details: the contest will take place at a fixed time (960 B, 963 B) before their fellow-pupils and a specially appointed judge (965 C-E). More or less elaborate preparation has been made by the contestants (960 B, 975 D).[c] Because of the occasion the school has been granted a holiday.

[a] Schuster thinks, rather, that Plutarch's chief aim is to make clear a moral and juridical relationship between man and beasts.

[b] See Schuster, pp. 57 ff. Aristotimus and Phaedimus were doubtless actual pupils of Plutarch.

[c] Plutarch lays special emphasis on preparation: *Mor.* 80 D, 652 B.

In the first part (chapters 1-8), the author demonstrates through the authoritarian voice of his own father that the Stoics, in so far as they affirm the irrationality of animals, contradict their own tenets. The second part proves that animals of all kinds are rational (chapters 9-36) ; the last small section, while refusing to award first honours in the debate, appears to contain Plutarch's exhortation to his pupils to continue the fight against the Stoics. For an excellent summary with sympathetic comments see E. R. Dodds, *Greece and Rome*, ii (1932/3), pp. 104-105.

D' Agostino [a] and others have shown that there is little originality in Plutarch's animal psychology, while not denying our author considerable vivacity in presentation. While it is true that whole sections, like 976 A-D, are drawn from the identical source that Aelian (*De Natura Animalium*, viii. 4-6) used, yet one has only to compare the use these authors have made of precisely the same material to recognize the great superiority of Plutarch. The principal sources have been disputed [b] : Chrysippus, Theophrastus, Hagnon, Alexander of Myndus,[c] Juba, Xenocrates have all been suggested, but there can be little doubt (as

[a] V. D' Agostino, *Archivo Italiano di Psicologia*, xi (1933), pp. 21 ff., a useful summarizing article.

[b] Hirzel, *Der Dialog*, ii, p. 179, n. 1. All of Hirzel's discussion is worth reading, though there are occasional slips, as when he affirms (p. 173, n. 2) that the story in 969 E f. goes back to Plutarch's own experience. This is quite unlikely in view of Aelian's version of the same story ; nor has Aelian drawn from Plutarch as some, including Wyttenbach, have thought.

[c] For the difficulty and danger involved in identifying the sources exactly see the lists of authorities furnished by Pliny in his first book. Alexander of Myndus, for example, does not appear at all as a source for books 8-11.

with *De Tranquillitate* [a] and many other works) that a considerable variety of sources has been utilized. Now that Schläpfer [b] has demonstrated that Plutarch had himself read and meditated upon great sections of classical poetry, critics may perhaps be more willing to allow our author first-hand familiarity with a wider range of prose, and works of reference as well.

It is by no means impossible that the work is incomplete in our MSS.; there are, at least, several demonstrable lacunae and it is possible that it was considerably longer and may even have justified its title when it left Plutarch's hands.

As for the date of the dialogue, the *terminus post quem* is A.D. 70 (not 79, as it cannot be certainly inferred from 974 A that Vespasian was then dead); it is probably a work of Plutarch's youth, preceding in any case the *Lives* and the *Symposiacs*. It may well date from Plutarch's anti-Stoic period which produced the *De Facie*, the *De Communibus Notitiis*, and the other anti-Chrysippean polemics. It has much in common with the *Gryllus* and the fragments of *De Esu Carnium* and some correspondence with the *Amatorius*.[c] It may, in fact, have been written during nearly the same period as that in which the elder Pliny (whose preface is dated A.D. 77) was compiling his own *Natural History*.

[a] See the introduction in the Loeb edition.

[b] *Plutarch und die klassischen Dichter*, Zürich, 1950, especially pp. 59-60.

[c] But allowance must be made for exaggerated and partially false premises in Hartman, *De Plutarcho*, p. 567. A modified chronological scheme of Plutarch's writings has lately been proposed by T. Sinko (*Polish Acad. Cracow*, 1947), but it is too complicated to be examined here.

The citations in D'Arcy Thompson's Oxford translation of Aristotle's *Historia Animalium*[a] are somewhat inaccurate and inconsistent, being, as he says, " compiled at various times and at long intervals during many years." Nevertheless the work is of great value and it may be hoped that the notes in this edition that rely on it (and these are many) have been adequately sifted. Also to be constantly and gratefully consulted are Thompson's *A Glossary of Greek Fishes* (Oxford, 1947) and *A Glossary of Greek Birds* (2nd edition, Oxford, 1936). There will be many references to Thompson's Aristotle ; but if the creature in question is a bird or a fish, it is to be understood that supplementary and often corrective material is to be found in the Glossaries. There is, further, a tribute of admiration due to A. W. Mair's L.C.L. edition of Oppian, with its exhaustive notes.[b] Rackham (L.C.L. Pliny, vol. III, books viii-xi) is very interesting on the text, but has almost completely denied himself the privilege of citing parallel passages.

The debunking of many of Plutarch's stories, if such a task is necessary, has been pleasantly done in the leisurely course of Bergen Evans' *The Natural History of Nonsense* (New York, 1946). It should be added, however, that modern scientific speculation is approaching somewhat closer to one of Plutarch's main tenets, if one may judge from such a work as W. C. Allee's *Coöperation Among Animals* (New York, 1951 : a revision of his earlier *The Social Life of*

[a] The Loeb edition of A. L. Peck is still awaited at this date of writing. It should be noted that quotations from the ninth book, in particular, are liable to peculiar suspicion and may not proceed from the great naturalist himself.

[b] Even the extremely hostile review in *Phil. Woch.* li (1931), pp. 1569 ff., exempts the notes from censure.

Animals); and on the thesis of animal intelligence see Evans himself, p. 173, and the authorities cited there, note 1.

Both the translation and the notes of this and the following essays have benefited immeasurably from an exhaustive criticism generously given them by Professor Alfred C. Andrews of the University of Miami, Florida. He has in fact supplied a number of valuable notes and also the Appendix, a classified zoological index. It must be understood, however, that any errors remaining are to be attributed solely to the editor.[a]

The dialogue is no. 147 in the catalogue of Lamprias. According to this document Plutarch wrote another work (no. 135) on the same subject: *Do Beasts Possess Reason?* But no. 127, Περὶ ζῴων ἀλόγων ποιητικός, is probably the same as our *Gryllus*, the following dialogue in this edition.

Abbreviations used in citing Modern Authors

Brands = J. P. J. M. Brands, *Griekseche Diernamen*, Purmerend, 1935.

Cotte = J. Cotte, *Poissons et animaux aquatiques au temps de Pline*. Paris, 1945.

Keller = Otto Keller, *Die antike Tierwelt*. Leipzig, 1909–1913.

Mair = A. W. Mair. *Oppian, Colluthus. Tryphiodorus*, L.C.L., 1928.

[a] Since our text was formed and our translation and notes composed a year or more before the appearance of the new Teubner edition, almost no new references have been added which are not purely textual. The curious reader is referred to Hubert's wealth of illustration to supplement our contributions.

Saint-Denis = E. de Saint-Denis, *Le Vocabulaire des animaux marins en latin classique*, Paris. 1947.
Schmid = Georg Schmid, "Die Fische in Ovids Halieuticon," *Philologus*, Supplementband xi (1907–1910), pp. 253-350.
Thompson, Aristotle = D'Arcy W. Thompson, The Works of Aristotle, vol. IV, *Historia animalium*, Oxford, 1910.
Thompson, Birds = D'Arcy W. Thompson, *A Glossary of Greek Birds*, rev. ed., Oxford, 1936.
Thompson, Fishes = D'Arcy W. Thompson, *A Glossary of Greek Fishes*, Oxford, 1947.

(959) # ΠΟΤΕΡΑ ΤΩΝ ΖΩΙΩΝ ΦΡΟΝΙΜΩΤΕΡΑ, ΤΑ ΧΕΡΣΑΙΑ Η ΤΑ ΕΝΥΔΡΑ

1. ΑΥΤΟΒΟΥΛΟΣ. Τὸν Τυρταῖον ὁ Λεωνίδας ἐρω-
B τηθεὶς ποῖόν τινα νομίζοι, "ἀγαθὸν ποιητὴν" ἔφη "νέων ψυχὰς κακκονῆν"[1]· ὡς τοῖς νέοις διὰ τῶν ἐπῶν ὁρμὴν ἐμποιοῦντα μετὰ θυμοῦ καὶ φιλοτιμίας ἐν ταῖς μάχαις ἀφειδοῦσιν[2] αὐτῶν. δέδια δή, ὦ φίλοι, μὴ καὶ τὸ τῆς κυνηγεσίας ἐγκώμιον ἐχθὲς ἀνεγνωσμένον ἐπάρῃ τοῦ μετρίου πέρα τοὺς φιλοθήρους ἡμῖν νεανίσκους, ὥστε τἄλλα πάρεργα καὶ τὸ μηδὲν ἡγεῖσθαι, πρὸς τοῦτο παντάπασι ῥυέντας· ὅπου δοκῶ μοι καὶ αὐτὸς ἐκ νέας αὖθις ἀρχῆς παρ'

[1] κακκονῆν van Herwerden after Meziriacus: κακύνειν or καλλύνειν. [2] ἀφειδοῦσιν van Herwerden: ἀφειδοῦσαν.

[a] Plutarch's father; on controversial points connected with this identification see Ziegler in Pauly-Wissowa, *s.v.* "Plutarchos," 642 ff.

[b] A friend of the household who appears in several of the *Symposiacs* and in the *Amatorius* also; he is not improbably the L. Mestrius Soclarus of *Inscr. Gr.* ix. 1. 61.

[c] A speaker also in *De Defectu Oraculorum* (*cf. Mor.* 412 E). Of the other speakers in this dialogue, nothing definite is known except what may be inferred from the present work.

[d] *Cf. Mor.* 235 F, where it is an anonymous saying; but the *Life of Cleomenes*, ii (xxiii = 805 D) also attributes it to Leonidas.

[e] The authorship of this work has been endlessly disputed,

WHETHER LAND OR SEA ANIMALS ARE CLEVERER

(The speakers in the dialogue are Autobulus,[a] Soclarus,[b] Optatus, Aristotimus, Phaedimus, and Heracleon.[c])

1. AUTOBULUS. When Leonidas was asked what sort of a person he considered Tyrtaeus to be, he replied, "A good poet to whet the souls of young men," [d] on the ground that by means of verses the poet inspired in young men keenness, accompanied by ardour and ambition whereby they sacrificed themselves freely in battle. And I am very much afraid, my friends, that the *Praise of Hunting* [e] which was read aloud to us yesterday may so immoderately inflame our young men who like the sport that they will come to consider all other occupations as of minor, or of no, importance and concentrate on this.[f] As a matter of fact, I myself caught the old fever all over again

but present opinion (*pace* Sinko, *Eos*, xv, pp. 113 ff. and Hubert, *Woch. f. klass. Phil.* xxviii, pp. 371 ff.) holds that it is Plutarch himself who wrote it (Schuster, *op. cit.* pp. 8 ff.). Bernardakis (vii, pp. 142-143) included this passage (959 B-D) as a fragment of the lost work.

[f] "There cannot be two passions more nearly resembling each other than hunting and philosophy" (Huxley, *Hume*, p. 139), and see Shorey's note on Plato, *Republic*, 432 B (L.C.L.); *cf.*, however, *Rep.* 535 D, 549 A. See also Isocrates, *Areopagiticus*, 43 f.; Xenophon, *Cynegetica*, i. 18; xii. 1. ff.; *Cyr.* viii. 1. 34-36; Pollux, preface to book v; the proems of Grattius, Nemesianus, Arrian, etc.

(959) ἡλικίαν ἐμπαθέστερος γεγονέναι καὶ ποθεῖν, ὥσπερ ἡ Εὐριπίδου Φαίδρα, "κυσὶ θωΰξαι βαλιαῖς ἐλά-
C φοις ἐγχριμπτόμενος"[a]· οὕτως ἔθιγέ μου πυκνὰ καὶ πιθανὰ τῶν ἐπιχειρημάτων ἐπάγων ὁ λόγος.

ΣΩΚΛΑΡΟΣ. Ἀληθῆ λέγεις, ὦ Αὐτόβουλε· καὶ γὰρ ἐκεῖνος ἔδοξέ μοι τὸ ῥητορικὸν ἐγεῖραι διὰ χρόνου, χαριζόμενος καὶ συνεαρίζων τοῖς μειρακίοις· μάλιστα δ' ᾔσθην τοὺς μονομάχους αὐτοῦ παραθέντος, ὡς οὐχ ἥκιστα τὴν θηρευτικὴν ἄξιον ἐπαινεῖν, ὅτι τοῦ πεφυκότος ἐν ἡμῖν ἢ μεμαθηκότος χαίρειν μάχαις ἀνδρῶν πρὸς ἀλλήλους διὰ σιδήρου τὸ πολὺ δεῦρο τρέψασα καθαρὰν παρέχει θέαν, ἅμα τέχνης καὶ τόλμης νοῦν ἐχούσης πρὸς ἀνόητον ἰσχὺν καὶ βίαν ἀντιταττομένης καὶ ἐπαινούσης τὸ Εὐριπίδειον

ἦ βραχύ τοι σθένος ἀνέρος. ἀλλὰ
D ποικιλίᾳ πραπίδων
δεινὰ μὲν[1] φῦλα πόντου
χθονίων τ' ἀερίων τε
δάμναται παιδεύματα.

2. ΑΥΤ. Καὶ μὴν ἐκεῖθεν, ὦ φίλε Σώκλαρε, φασὶν ἥκειν ἐπ' ἀνθρώπους τὴν ἀπάθειαν καὶ τὴν ἀγριότητα γευσαμένην φόνου καὶ προεθισθεῖσαν ἐν ταῖς ἄγραις καὶ τοῖς κυνηγεσίοις αἷμα καὶ τραύματα ζῴων μὴ δυσχεραίνειν ἀλλὰ χαίρειν σφαττομένοις καὶ ἀποθνῄσκουσιν. εἶθ' ὥσπερ ἐν Ἀθήναις

[1] δεινὰ μὲν *Mor.* 98 E, from which several other corrections have been introduced: δαμᾷ.

[a] *Cf. Hippolytus*, 218 f. It follows from the fuller quotation in *Mor.* 52 C that Plutarch's text of Euripides inverted the order of these lines as given in our MSS. of the tragedian.

in spite of my years and longed, like Euripides'[a] Phaedra,

> To halloo the hounds and chase the dappled deer ;

so moved was I by the discourse as it brought its solid and convincing arguments to bear.

SOCLARUS. Exactly so, Autobulus. That reader yesterday seems to have roused his rhetoric from its long disuse[b] to gratify the young men and share their vernal mood.[c] I was particularly pleased with his introduction of gladiators and his argument that it is as good a reason as any to applaud hunting that after diverting to itself most of our natural or acquired pleasure in armed combats between human beings it affords an innocent spectacle of skill and intelligent courage pitted against witless force and violence. It agrees with that passage of Euripides[d] :

> Slight is the strength of men ;
> But through his mind's resource
> He subdues the dread
> Tribes of the deep and races
> Bred on earth and in the air.

2. AUTOBULUS. Yet that is the very source, my dear Soclarus, from which they say insensibility spread among men and the sort of savagery that learned the taste of slaughter on its hunting trips[e] and has grown accustomed to feel no repugnance for the wounds and gore of beasts, but to take pleasure in their violent death. The next step is like what

[b] Presumably an autobiographical detail.

[c] The word is found only here, but may well be right if Plutarch is in a poetical, as well as a playful, humour.

[d] Frag. 27 from the *Aeolus* (so Stobaeus) : Nauck, *Trag. Graec. Frag.* pp. 370 f. : *cf. Mor.* 98 E. The text is somewhat confused.

[e] *Cf.* Porphyry, *De Abstinentia*, iii. 20.

(959) πρῶτός τις ὑπὸ τῶν τριάκοντα συκοφάντης ἀποθανὼν ἐπιτήδειος ἐλέχθη, καὶ δεύτερος ὁμοίως καὶ τρίτος· ἐκ τούτου δὲ κατὰ μικρὸν ἤδη προϊόντες ἥπτοντο τῶν ἐπιεικῶν καὶ τέλος οὐδὲ τῶν ἀρίστων
E ἀπέσχοντο πολιτῶν· οὕτως ὁ πρῶτος ἄρκτον ἀνελὼν ἢ λύκον εὐδοκίμησεν· ἢ βοῦς ἴσως[1] ἢ σῦς αἰτίαν ἔσχε προκειμένων ἱερῶν γευσάμενος ἐπιτήδειος ἀποθανεῖν· ἔλαφοι δὲ τοὐντεῦθεν ἤδη καὶ λαγωοὶ καὶ δορκάδες ἐσθιόμενοι προβάτων καὶ κυνῶν ἐνιαχοῦ καὶ ἵππων κρέα προυξένησαν· "τιθασὸν δὲ χῆνα καὶ περιστεράν, ἐφέστιον οἰκέτιν," τὸ Σοφοκλέους,[2] οὐχ ὡς γαλαῖ καὶ αἴλουροι τροφῆς ἕνεκα διὰ λιμόν, ἀλλ' ἐφ' ἡδονῇ καὶ ὄψῳ διασπῶντες καὶ κατακόπτοντες ὅσον ἐστὶ τῇ φύσει φονικὸν καὶ θηριῶδες ἔρρωσαν καὶ πρὸς οἶκτον ἀκαμπὲς[3] ἀπειργάσαντο, τοῦ δ' ἡμέρου τὸ πλεῖστον ἀπήμ-
F βλυναν· ὥσπερ αὖ πάλιν οἱ Πυθαγορικοὶ τὴν εἰς[4] τὰ θηρία πραότητα μελέτην ἐποιήσαντο πρὸς τὸ

[1] ἢ βοῦς ἴσως W. C. H. : καὶ βοῦς τις.
[2] τὸ Σοφοκλέους Emperius : τε Σοφοκλῆς.
[3] ἀκαμπὲς] ἀπαθὲς Porphyry.
[4] εἰς W. C. H. : πρὸς.

[a] See 998 B *infra* and *cf.* Müller, *Hist. Graec. Frag.* i, p. 269, Ephorus, frag. 125 : it is not, however, accepted as from Ephorus by Jacoby (*cf.* Sallust, *Catiline*, li. 28-31). We must remember, during the following discussion, that zoology used to be the handmaid of ethics.

[b] *Cf.* 993 B *infra.* The Age of Cronus, when beasts were unharmed, is admirably described in Plato, *Politicus*, 270 C ff.

[c] "That is, they put grain on the altar to make the animal volunteer, as it were, to die" (Post); and the consent of the victim was secured by pouring water on it to make it shake its head. See *Mor.* 729 F and the article "Opfer" in *RE*, xviii. 612.

happened at Athens [a]: the first man put to death by the Thirty was a certain informer who was said to deserve it, and so was the second and the third; but after that they went on, step by step, until they were laying hands on honest men and eventually did not spare even the best of the citizens. Just so the first man [b] to kill a bear or a wolf won praise; and perhaps some cow or pig was condemned as suitable to slay because it had tasted the sacred meal placed before it.[c] So from that point, as they now went on to eat the flesh of deer and hare and antelope, men were introduced to the consumption of sheep and, in some places, of dogs and horses.

The tame goose and the dove upon the hearth,

as Sophocles [d] says, were dismembered and carved for food—not that hunger compelled men as it does weasels and cats, but for pleasure and as an appetizer.[e] Thus the brute [f] and the natural lust to kill in man were fortified and rendered inflexible to pity, while gentleness was, for the most part, deadened. It was in this way, on the contrary, that the Pythagoreans,[g] to inculcate humanity and compassion, made a

[d] Nauck, *Trag. Graec. Frag.* p. 314, frag. 782; Pearson, vol. III, p. 68, frag. 866.

[e] *Cf.* 991 D, 993 B, 995 C *infra*. Or "as meat to go with their bread": for fowl is not ordinarily an appetizer.

[f] From this point to the end of chapter 5 (963 F) the greater part of the text is excerpted by Porphyry, *De Abstinentia*, iii. 20-24 (pp. 211-220, ed. Nauck). This indirect transmission, with its not infrequent changes, omissions, and variations, gives valuable evidence; but obvious errors on either side have not been mentioned here.

[g] *Cf.* 964 F, 993 A *infra*, and *Mor.* 86 D, 729 E. "The practice is correctly stated; the alleged motive is not. The taboo on meat stemmed from belief in the transmigration of souls" (Andrews).

(959) φιλάνθρωπον καὶ φιλοίκτιρμον· ἡ γὰρ συνήθεια
960 δεινὴ τοῖς κατὰ μικρὸν ἐνοικειουμένοις πάθεσι πόρρω προαγαγεῖν τὸν ἄνθρωπον.

Ἀλλ' οὐκ οἶδ' ὅπως ἐν λόγοις γεγονότες λελήθαμεν οὔτε τῶν χθὲς ἡμῖν γεγονότων οὔτε τῶν τάχα δὴ γενησομένων σήμερον ἀπηρτημένοις. ἀποφηνάμενοι[1] γὰρ ἐχθές, ὡς οἶσθα, μετέχειν ἁμωσγέπως πάντα τὰ ζῷα διανοίας καὶ λογισμοῦ παρέσχομεν οὐκ ἄμουσον οὐδ' ἄχαριν τοῖς θηρατικοῖς νεανίσκοις περὶ συνέσεως θηρίων ἐνάλων τε καὶ πεζῶν ἅμιλλαν ἣν σήμερον, ὡς ἔοικε, βραβεύσομεν, ἄν γε δὴ ταῖς προκλήσεσιν οἱ περὶ Ἀριστό-
B τιμον καὶ Φαίδιμον ἐμμείνωσιν· ἐκείνων γὰρ ὁ μὲν τῆς γῆς ὡς διαφέροντα τῷ φρονεῖν ζῷα γεννώσης ἐπεδίδου τοῖς ἑταίροις συνήγορον ἑαυτόν, ὁ δὲ τῆς θαλάττης.

ΣΩΚΛ. Ἐμμενοῦσιν,[2] ὦ Αὐτόβουλε, καὶ ὅσον οὔπω πάρεισι· συντασσομένους γὰρ αὐτοὺς ἕωθεν ἑώρων. ἀλλ' εἰ βούλει, πρὸ τοῦ ἀγῶνος ὅσα τοῖς ἐχθὲς λόγοις προσήκοντα λεχθῆναι καιρὸν οὐκ ἔσχεν ἢ σὺν[3] οἴνῳ καὶ παρὰ πότον οὐ μετὰ σπουδῆς ἐλέχθη πρὸς αὐτοὺς ἀναλάβωμεν. ἐδόκει γάρ τι πραγματικῶς οἷον ἀντηχεῖν ἐκ τῆς Στοᾶς, ὡς τῷ θνητῷ τὸ ἀθάνατον ἀντίκειται καὶ τῷ φθαρτῷ τὸ ἄφθαρτον καὶ σώματί γε τὸ ἀσώματον· οὕτως ὑπ-
C αρχοντι τῷ[4] λογικῷ χρῆναι τὸ ἄλογον ἀντικεῖσθαι

[1] ἀπηρτημένοις Reiske: ἀπηρτημένοι. ἀποφηνάμενοι added by Bernardakis after Wyttenbach.
[2] ἐμμενοῦσιν W. C. H.: ἐμμένουσιν.
[3] σὺν] ἐν van Herwerden.
[4] τῷ] γε τῷ Porphyry.

practice of kindness to animals ; for habituation has a strange power to lead men onward by a gradual familiarization of the feelings.

Well, we have somehow fallen unawares into a discussion not unconnected with what we said yesterday nor yet with the argument that is presently to take place to-day. Yesterday, as you know, we proposed the thesis that all animals partake in one way or another of reason and understanding, and thereby offered our young hunters a field of competition not lacking in either instruction or pleasure : the question whether land or sea animals have superior intelligence. This argument, it seems, we shall to-day adjudicate if Aristotimus and Phaedimus stand by their challenges ; for Aristotimus put himself at his comrades' disposal to advocate the land as producer of animals with superior intelligence, while the other will be pleader for the sea.

SOCLARUS. They'll stand by their word, Autobulus ; they'll be here any minute now. Early this morning I observed them both preparing for the fray. But, if you like, before the contest begins, let us review the discussion of whatever topics are germane to our conversation of yesterday, but were not then discussed, either because no occasion offered, or, since we were in our cups, were treated too lightly. I thought, in fact, that I caught the reverberation of a material objection from the Stoa [a] : just as the immortal is opposed to the mortal and the imperishable to the perishable, and, of course, the incorporeal to the corporeal ; just so, if there is rationality, the irrational must exist as its opposite and counterpart.

[a] *Cf.* von Arnim, *S.V.F.* ii, pp. 49 ff., 172 ff. ; and Pohlenz, *B.P.W.* xxiii (1903), col. 966, on Chrysippus, frag. 182.

(960) καὶ ἀνθυπάρχειν καὶ μὴ μόνην ἐν τοσαῖσδε συζυγίαις ἀτελῆ τήνδε λείπεσθαι καὶ πεπηρωμένην.

3. ΑΥΤ. Τίς δέ, ὦ φίλε Σώκλαρε, τοῦτ' ἠξίωσεν, ὄντος ἐν τοῖς πράγμασι τοῦ λογικοῦ, μὴ εἶναι τὸ ἄλογον; πολὺ γάρ ἐστι καὶ ἄφθονον ἐν πᾶσι τοῖς ψυχῆς ἀμοιροῦσι καὶ οὐδὲν[1] ἑτέρας δεόμεθα πρὸς τὸ λογικὸν ἀντιθέσεως, ἀλλὰ πᾶν εὐθὺς τὸ ἄψυχον ὡς ἄλογον καὶ ἀνόητον ἀντίκειται τῷ μετὰ ψυχῆς λόγον ἔχοντι καὶ διάνοιαν. εἰ δέ τις ἀξιοῖ μὴ κολοβὸν εἶναι τὴν φύσιν ἀλλὰ τὴν ἔμψυχον φύσιν ἔχειν τὸ μὲν λογικὸν τὸ δ' ἄλογον, ἕτερος
D ἀξιώσει τὴν ἔμψυχον φύσιν ἔχειν τὸ μὲν φανταστικὸν τὸ δ' ἀφαντασίωτον, καὶ τὸ μὲν αἰσθητικὸν τὸ δ' ἀναίσθητον· ἵνα δὴ τὰς ἀντιζύγους ταύτας καὶ ἀντιθέτους ἕξεις καὶ στερήσεις περὶ ταὐτὸν ἡ φύσις ἔχῃ γένος οἷον ἰσορροπούσας.[2] εἰ δ' ἄτοπος ὁ ζητῶν τοῦ ἐμψύχου τὸ μὲν αἰσθητικὸν τὸ δ' ἀναίσθητον εἶναι, καὶ τὸ μὲν φαντασιούμενον τὸ δ' ἀφαντασίωτον, ὅτι πᾶν τὸ ἔμψυχον αἰσθητικὸν εὐθὺς εἶναι καὶ φανταστικὸν πέφυκεν, οὐδ' οὗτος ἐπιεικῶς ἀπαιτήσει τὸ μὲν λογικὸν εἶναι τοῦ ἐμψύχου τὸ δ' ἄλογον, πρὸς ἀνθρώπους διαλεγόμενος μηδὲ ἓν οἰομένους αἰσθήσεως μετέχειν ὃ μὴ καὶ συνέσεως, μηδ' εἶναι ζῷον ᾧ μὴ δόξα τις καὶ

[1] οὐδὲν Porphyry : οὐδ' ἔτι.
[2] ἰσορροπούσας] ἰσορρόπους Porphyry, who adds ἀλλ' ἄτοπον τοῦτό γε.

[a] There seems to be a great deal more anti-Stoic polemic

This alone, among all these pairings, must not be left incomplete and mutilated.

3. AUTOBULUS.[a] But who ever, my dear Soclarus, maintained that, while rationality exists in the universe, there is nothing irrational? For there is a plentiful abundance of the irrational in all things that are not endowed with a soul; we need no other sort of counterpart for the rational: everything that is soulless, since it has no reason or intelligence, is by definition in opposition to that which, together with a soul, possesses also reason and understanding. Yet suppose someone were to maintain that nature must not be left maimed, but that that part of nature which is endowed with a soul should have its irrational as well as its rational aspect, someone else is bound to maintain that nature endowed with a soul must have both an imaginative and an unimaginative part, and both a sentient part and an insentient. They want nature, they say, to have these counteractive and contraposed positives and negatives of the same kind counterbalanced, as it were. But if it is ridiculous to require an antithesis of sentient and insentient within the class of living things, or an antithesis of imaginative and unimaginative, seeing that it is the nature of every creature with a soul to be sentient and imaginative from the hour of its birth, so he, also, is unreasonable who demands a division of the living into a rational and an irrational part—and that, too, when he is arguing with men who believe that nothing is endowed with sensation which does not also partake of intelligence and that there is no living thing which does not naturally

in the following speeches than von Arnim has admitted into his compilation. See especially the notes on 961 c ff. *infra*.

(960) E λογισμὸς ὥσπερ αἴσθησις καὶ ὁρμὴ κατὰ φύσιν πάρεστιν. ἡ γὰρ φύσις, ἥν ἕνεκά του καὶ πρός τι πάντα ποιεῖν ὀρθῶς λέγουσιν, οὐκ ἐπὶ ψιλῷ τῷ πάσχον τι[1] αἰσθάνεσθαι τὸ ζῷον αἰσθητικὸν ἐποίησεν· ἀλλ' ὄντων μὲν οἰκείων πρὸς αὐτὸ πολλῶν ὄντων δ' ἀλλοτρίων, οὐδ' ἀκαρὲς ἦν περιεῖναι μὴ μαθόντι τὰ μὲν φυλάττεσθαι τοῖς δὲ συμφέρεσθαι. τὴν μὲν οὖν γνῶσιν ἀμφοῖν ὁμοίως ἡ αἴσθησις ἑκάστῳ παρέχει· τὰς δ' ἑπομένας τῇ αἰσθήσει τῶν μὲν ὠφελίμων λήψεις καὶ διώξεις, διακρούσεις δὲ καὶ φυγὰς τῶν ὀλεθρίων καὶ λυπηρῶν οὐδεμία F μηχανὴ παρεῖναι[2] τοῖς μὴ λογίζεσθαί τι καὶ κρίνειν καὶ μνημονεύειν καὶ προσέχειν πεφυκόσιν· ἀλλ' ὧν ἂν ἀφέλῃς παντάπασι προσδοκίαν μνήμην πρόθεσιν παρασκευὴν τὸ ἐλπίζειν τὸ δεδοικέναι τὸ ἐπιθυμεῖν τὸ ἀσχάλλειν, οὔτ' ὀμμάτων ὄφελος οὐδὲν αὐτοῖς παρόντων οὔτ' ὤτων· αἰσθήσεώς τε πάσης καὶ φαντασίας τὸ χρώμενον οὐκ ἐχούσης ἀπηλλάχθαι 961 βέλτιον ἢ πονεῖν καὶ λυπεῖσθαι καὶ ἀλγεῖν, ᾧ διακρούσεται ταῦτα μὴ παρόντος.

Καίτοι Στράτωνός γε τοῦ φυσικοῦ λόγος ἐστὶν ἀποδεικνύων ὡς οὐδ' αἰσθάνεσθαι τὸ παράπαν ἄνευ τοῦ νοεῖν ὑπάρχει· καὶ γὰρ γράμματα πολλάκις ἐπιπορευομένους τῇ ὄψει καὶ λόγοι προσπίπτοντες τῇ ἀκοῇ διαλανθάνουσιν ἡμᾶς καὶ διαφεύγουσι πρὸς ἑτέροις τὸν νοῦν ἔχοντας· εἶτ' αὖθις ἐπανῆλθε καὶ

[1] πάσχον τι Reiske: πάσχοντι (πάσχειν καὶ Porphyry).
[2] παρεῖναι added by Porphyry.

[a] Aristotle and Theophrastus *passim*; *cf.* also *Mor.* 646 c, 698 b.

possess both opinion and reason, just as it has sensation and appetite. For nature, which, they [a] rightly say, does everything with some purpose and to some end, did not create the sentient creature merely to be sentient when something happens to it. No, for there are in the world many things friendly to it, many also hostile; and it could not survive for a moment if it had not learned to give the one sort a wide berth while freely mixing with the other. It is, to be sure, sensation that enables each creature to recognize both kinds; but the acts of seizing or pursuing that ensue upon the perception of what is beneficial, as well as the eluding or fleeing of what is destructive or painful, could by no means occur in creatures naturally incapable of some sort of reasoning and judging, remembering and attending. Those beings, then, which you deprive of all expectation, memory, design, or preparation, and of all hopes, fears, desires, or griefs—they will have no use for eyes or ears either, even though they have them. Indeed, it would be better to be rid of all sensation and imagination that has nothing to make use of it, rather than to know toil and distress and pain while not possessing any means of averting them.

There is, in fact, a work of Strato,[b] the natural philosopher, which proves that it is impossible to have sensation at all without some action of the intelligence. Often, it is true, while we are busy reading, the letters may fall on our eyes, or words may fall on our ears, which escape our attention since our minds are intent on other things; but later the mind recovers, shifts its course, and follows up every

[b] Frag. 112, ed. Wehrli (*Die Schule des Aristoteles*, v, p. 34).

(961) μεταθεῖ καὶ διώκει τῶν προειμένων[1] ἕκαστον ἀναλεγόμενος· ᾗ καὶ λέλεκται

νοῦς ὁρῇ καὶ νοῦς ἀκούει, τἄλλα[2] κωφὰ καὶ τυφλά,[a]

ὡς τοῦ περὶ τὰ ὄμματα καὶ ὦτα πάθους, ἂν μὴ παρῇ τὸ φρονοῦν, αἴσθησιν οὐ ποιοῦντος. διὸ καὶ
B Κλεομένης ὁ βασιλεύς, παρὰ πότον εὐδοκιμοῦντος ἀκροάματος, ἐρωτηθεὶς εἰ μὴ φαίνεται σπουδαῖον, ἐκέλευσεν ἐκείνους σκοπεῖν, αὐτὸς[3] γὰρ ἐν Πελοποννήσῳ τὸν νοῦν ἔχειν. ὅθεν ἀνάγκη πᾶσιν, οἷς τὸ αἰσθάνεσθαι, καὶ τὸ νοεῖν ὑπάρχειν, εἰ τῷ νοεῖν αἰσθάνεσθαι πεφύκαμεν.

Ἔστω δὲ μὴ δεῖσθαι τοῦ νοῦ τὴν αἴσθησιν πρὸς τὸ αὑτῆς ἔργον· ἀλλ' ὅταν γε τῷ ζῴῳ πρὸς τὸ οἰκεῖον καὶ τἀλλότριον ἡ αἴσθησις ἐνεργασαμένη διαφορὰν ἀπέλθῃ, τί τὸ μνημονεῦόν ἐστιν ἤδη καὶ δεδιὸς τὰ λυποῦντα καὶ ποθοῦν τὰ ὠφέλιμα καί, μὴ
C παρόντων, ὅπως παρέσται μηχανώμενον ἐν αὑτοῖς καὶ παρασκευαζόμενον ὁρμητήρια καὶ καταφυγὰς καὶ θήρατρα πάλιν αὖ τοῖς ἁλωσομένοις[4] καὶ ἀποδράσεις τῶν ἐπιτιθεμένων; καὶ ταυτί γε[5] κἀκεῖνοι λέγοντες ἀποκναίουσιν, ἐν ταῖς εἰσαγωγαῖς ἑκάστοτε τὴν "πρόθεσιν" ὁριζόμενοι "σημείωσιν

[1] προειμένων Kronenberg: προϊεμένων (προειρημένων Porphyry; παρειμένων Nauck).
[2] τἄλλα Meziriacus: τὰ δ' ἄλλα.
[3] αὐτὸς Porphyry: αὐτὸν.
[4] τοῖς ἁλοῦσιν Porphyry.
[5] καὶ ταυτί γε]·καίτοι γε Porphyry.

[a] A frequently occurring quotation, attributed to Epicharmus in *Mor.* 336 B (Kaibel, *Com. Graec. Frag.* i, p. 137,

detail that had been neglected; and this is the meaning of the saying [a]:

> Mind has sight and Mind has hearing;
> Everything else is deaf and blind,

indicating that the impact on eyes and ears brings no perception if the understanding is not present. For this reason also King Cleomenes, when a recital made at a banquet was applauded and he was asked if it did not seem excellent, replied that the others must judge, for his mind was in the Peloponnesus. So that, if we are so constituted that to have sensation we must have understanding, then it must follow that all creatures which have sensation can also understand.

But let us grant that sensation needs no help of intelligence to perform its own function; nevertheless, when the perception that has caused an animal to distinguish between what is friendly and what is hostile is gone, what is it that from this time on remembers the distinction, fears the painful, and wants the beneficial? And, if what it wants is not there, what is there in animals that devises means of acquiring it and providing lairs and hiding-places—both traps for prey and places of refuge from attackers? And yet those very authors [b] rasp our ears by repeatedly defining in their *Introductions* [c] "purpose" as "an indication of intent to complete,"

frag. 249; Diels, *Frag. der Vorsok.* i, p. 200, frag. 12); see also *Mor.* 98 c and 975 b *infra*. The fullest interpretation is that of Schottlaender, *Hermes*, lxii, pp. 437 f.; and see also Wehrli's note, pp. 72 f.

[b] The Stoics again: von Arnim, *S.V.F.* iii, p. 41, Chrysippus, frag. 173 of the *Ethica*.

[c] Or "elementary treatises": titles used by Chrysippus (von Arnim, *op. cit.* ii, pp. 6 f.; iii, p. 196).

(961) ἐπιτελειώσεως," τὴν δ' "ἐπιβολὴν" "ὁρμὴν πρὸ ὁρμῆς," "παρασκευὴν" δὲ "πρᾶξιν πρὸ πράξεως," "μνήμην" δὲ "κατάληψιν ἀξιώματος παρεληλυθότος, οὗ τὸ παρὸν ἐξ αἰσθήσεως κατελήφθη." τούτων γὰρ οὐδὲν ὅ τι μὴ λογικόν ἐστι, καὶ πάντα τοῖς ζῴοις ὑπάρχει πᾶσιν· ὥσπερ ἀμέλει καὶ τὰ περὶ τὰς νοήσεις, ἃς ἐναποκειμένας μὲν
D "ἐννοίας" καλοῦσι, κινουμένας δὲ "διανοήσεις." τὰ δὲ πάθη σύμπαντα κοινῶς "κρίσεις φαύλας καὶ δόξας" ὁμολογοῦντες εἶναι, θαυμαστὸν ὅτι δὴ παρορῶσιν ἐν τοῖς θηρίοις ἔργα καὶ κινήματα πολλὰ μὲν θυμῶν πολλὰ δὲ φόβων καὶ ναὶ μὰ[1] Δία φθόνων καὶ ζηλοτυπιῶν· αὐτοὶ δὲ καὶ κύνας ἁμαρτάνοντας καὶ ἵππους κολάζουσιν, οὐ διὰ κενῆς ἀλλ' ἐπὶ σωφρονισμῷ, λύπην δι' ἀλγηδόνος ἐμποιοῦντες αὐτοῖς, ἣν μετάνοιαν ὀνομάζομεν.

Ἡδονῆς δὲ τῇ μὲν[2] δι' ὤτων ὄνομα κήλησίς ἐστι τῇ δὲ δι' ὀμμάτων γοητεία· χρῶνται δ' ἑκατέραις[3] ἐπὶ τὰ θηρία. κηλοῦνται μὲν γὰρ[4] ἔλαφοι καὶ
E ἵπποι σύριγξι καὶ αὐλοῖς καὶ τοὺς παγούρους ἐκ τῶν χηραμῶν ἀνακαλοῦνται βιαζόμενοι ταῖς φώτιγξι,[5] καὶ τὴν θρίσσαν ᾀδόντων καὶ κροτούντων

[1] ναὶ μὰ] νὴ Porphyry.
[2] τῇ μὲν . . . τῇ δὲ Bernardakis: τῷ μὲν . . . τῷ δὲ (τῆς μὲν . . . τῆς δὲ Porphyry).
[3] ἑκατέραις Porphyry: ἑκατέροις.
[4] μὲν γὰρ Hirschig: μὲν.
[5] βιαζόμενοι ταῖς φώτιγξι] μελιζόμενοι ταῖς σύριγξι Porphyry.

[a] That is, by sensation we apprehend the proposition "Socrates is snub-nosed," by memory the proposition "Socrates was snub-nosed." The literature on this complicated subject has been collected and analysed in *Class. Rev.* lxvi (1952), pp. 146 f.

"design" as "an impulse before an impulse," "preparation" as "an act before an act," and "memory" as "an apprehension of a proposition in the past tense of which the present tense has been apprehended by perception."[a] For there is not one of these terms that does not belong to logic; and the acts are all present in all animals as, of course, are cognitions which, while inactive, they call "notions," but when they are once put into action, "concepts." And though they admit that emotions one and all are "false judgements and seeming truths,"[b] it is extraordinary that they obviously fail to note many things that animals do and many of their movements that show anger or fear or, so help me, envy or jealousy. They themselves punish dogs and horses that make mistakes, not idly but to discipline them; they are creating in them through pain a feeling of sorrow, which we call repentance.

Now pleasure that is received through the ears is a means of enchantment, while that which comes through the eyes is a kind of magic: they use both kinds against animals. For deer and horses[c] are bewitched by pipes and flutes, and crabs[d] are involuntarily lured from their holes by lotus pipes[e]; it is also reported that shad will rise to the surface

[b] *Cf.* von Arnim, *op. cit.* i, pp. 50 f.; iii, pp. 92 ff.; see also *Mor.* 449 c.

[c] *Cf.* Aelian, *De Natura Animal.* xii. 44, 46; Antigonus, *Hist. Mirab.* 29.

[d] Dolphins also are caught by music: Pliny, *Nat. Hist.* xi. 137.

[e] As described in Athenaeus, 182 e (*cf.* 175 e); *cf.* Aelian, *De Natura Animal.* vi. 31. "Better would be 'Egyptian flutes,' as the term 'lotus' is somewhat misleading. It is probably the wood of the nettle-tree, *Celtis australis*, that is indicated" (Andrews).

(961) ἀναδύεσθαι καὶ προϊέναι λέγουσιν. ὁ δ' ὦτος αὖ πάλιν ἁλίσκεται γοητευόμενος, ὀρχουμένων ἐν ὄψει μεθ' ἡδονῆς ἅμα ῥυθμῷ γλιχόμενος τοὺς ὤμους συνδιαστρέφειν.[1]

Οἱ δὲ περὶ τούτων ἀβελτέρως λέγοντες μήθ' ἥδεσθαι μήτε θυμοῦσθαι μήτε φοβεῖσθαι μήτε παρασκευάζεσθαι μήτε μνημονεύειν, ἀλλ' "ὡσανεὶ μνημονεύειν" τὴν μέλιτταν καὶ "ὡσανεὶ παρασκευάζεσθαι" τὴν χελιδόνα καὶ "ὡσανεὶ θυμοῦσθαι" τὸν λέοντα καὶ "ὡσανεὶ φοβεῖσθαι" τὴν
F ἔλαφον, οὐκ οἶδα τί χρήσονται τοῖς λέγουσι μήτε[2] βλέπειν μήτ' ἀκούειν ἀλλ' "ὡσανεὶ βλέπειν" αὐτὰ καὶ "ὡσανεὶ ἀκούειν," μηδὲ φωνεῖν ἀλλ' "ὡσανεὶ φωνεῖν," μηδ' ὅλως ζῆν ἀλλ' "ὡσανεὶ ζῆν"· ταῦτα γὰρ ἐκείνων οὐ μᾶλλόν ἐστι λεγόμενα παρὰ τὴν ἐνάργειαν, ὡς ἐγὼ πείθομαι.

4. ΣΩΚΛ. Κἀμὲ τοίνυν, ὦ Αὐτόβουλε, ταῦτά γε τίθει πειθόμενον· τῷ δὲ τοῖς ἀνθρωπίνοις ἤθεσι
962 καὶ βίοις καὶ πράξεσι καὶ διαίταις τὰ τῶν ζῴων παρατιθέναι ἄλλην τε πολλὴν ἐνορῶν[3] φλαυρότητα καὶ τῆς ἀρετῆς, πρὸς ἣν ὁ λόγος γέγονε, μηδέν'

[1] συνδιαστρέφειν Hubert (*ad Mor.* 705 A): εὖ διαφέρειν (συνδιαφέρειν) Kronenberg).
[2] μήτε . . . μήτ' Hirschig: μηδὲ . . . μηδ'.
[3] ἐνορῶν Bernardakis from Porphyry: ἐν ὅλω.

[a] *Cf.* Aelian, *De Natura Animal.* vi. 32; Athenaeus, 328 f, on the *trichis*, which is a kind of *thrissa* (*cf.* Athenaeus, 328 e); and see Mair on Oppian, *Hal.* i. 244 (L.C.L.).
[b] *Cf. Mor.* 52 B (where the L.C.L., probably wrongly, reads "the ape"); 705 A; Athenaeus, 390 f; Aelian, *De Natura Animal.* xv. 28; Pliny, *Nat. Hist.* x. 68; Aristotle, *Historia Animal.* viii. 13 (597 B 22 ff.) and the other

and approach when there is singing and clapping.[a] The horned owl,[b] again, can be caught by the magic of movement, as he strives to twist his shoulders in delighted rhythm to the movements of men dancing before him.

As for those who foolishly affirm that animals do not feel pleasure or anger or fear or make preparations or remember, but that the bee "as it were" [c] remembers and the swallow "as it were" prepares her nest and the lion "as it were" grows angry and the deer "as it were" is frightened—I don't know what they will do about those who say that beasts do not see or hear, but "as it were" hear and see; that they have no cry but "as it were"; nor do they live at all but "as it were." For these last statements (or so I believe) are no more contrary to plain evidence than those that they have made.

4. SOCLARUS. Well, Autobulus, you may count me also as one who believes your statements; yet on comparing the ways of beasts with human customs and lives, with human actions and manner of living, I find not only many other defects in animals, but this especially: they do not explicitly aim at virtue,[d] for which purpose reason itself exists; nor do they

references of Hubert at *Mor.* 705 A and Gulick on Athenaeus, 629 f. Contrast Aelian, *De Natura Animal.* i. 39, on doves. Porphyry omits this sentence.

[c] A favourite expression of Aristotle's; but it is the Stoics who are being reproved here (*cf.* von Arnim, *S.V.F.* ii, p. 240, Chrysippus, frag. 887). This seems to be the only appearance of the word in Plutarch, unless Pohlenz is right in conjecturing it at *Mor.* 600 F, or Rasmus at 1054 C in other Stoic quotations.

[d] On animals possessing *aretê* see Aelian's preface to the first book of *De Natura Animal.*; *cf.* also *Mor.* 986 F *infra*; *al.*

(962) ἐμφανῆ[1] στοχασμὸν αὐτῶν μηδὲ προκοπὴν μηδ' ὄρεξιν, ἀπορῶ πῶς ἡ φύσις ἔδωκε τὴν ἀρχὴν αὐτοῖς,[2] ἐπὶ τὸ τέλος ἐξικέσθαι μὴ δυναμένοις.

ΑΥΤ. Ἀλλὰ τοῦτο μὲν οὐδ' αὐτοῖς ἐκείνοις, ὦ Σώκλαρε, τοῖς ἀνδράσιν ἄτοπον εἶναι δοκεῖ· τὴν γοῦν πρὸς τὰ ἔκγονα φιλοστοργίαν ἀρχὴν μὲν ἡμῖν κοινωνίας καὶ δικαιοσύνης τιθέμενοι, πολλὴν δὲ τοῖς ζῴοις καὶ ἰσχυρὰν ὁρῶντες παροῦσαν, οὔ
B φασιν αὐτοῖς οὐδ' ἀξιοῦσι μετεῖναι δικαιοσύνης. ἡμιόνοις δὲ τῶν γεννητικῶν μορίων οὐδὲν ἐνδεῖ· καὶ γὰρ αἰδοῖα καὶ μήτρας καὶ τὸ χρῆσθαι μεθ' ἡδονῆς τούτοις ἔχουσαι πρὸς τὸ τέλος οὐκ ἐξικνοῦνται τῆς γενέσεως.[3] σκόπει δ' ἄλλως, μὴ καὶ καταγέλαστόν ἐστι τοὺς Σωκράτας καὶ τοὺς Πλάτωνας οὐδὲν ἐλαφροτέρᾳ κακίᾳ τοῦ τυχόντος ἀνδραπόδου συνεῖναι φάσκειν,[4] ἀλλ' ὁμοίως ἄφρονας εἶναι καὶ ἀκολάστους καὶ ἀδίκους, εἶτα τῶν θηρίων αἰτιᾶσθαι τὸ μὴ καθαρὸν[5] μηδ' ἀπηκριβωμένον πρὸς ἀρετὴν ὡς στέρησιν[6] οὐχὶ φαυλότητα λόγου καὶ ἀσθένειαν, καὶ ταῦτα τὴν[7] κακίαν ὁμολογοῦντας εἶναι λογικήν,
C ἧς πᾶν θηρίον ἀναπέπλησται· καὶ γὰρ δειλίαν πολλοῖς καὶ ἀκολασίαν ἀδικίαν τε καὶ κακόνοιαν[8] ὁρῶμεν ἐνυπάρχουσαν.[9] ὁ δ' ἀξιῶν τὸ μὴ πεφυκὸς ὀρθότητα λόγου δέχεσθαι μηδὲ λόγον δέχεσθαι[10]

[1] ἐμφανῆ Porphyry: ἐμφήνη.
[2] αὐτοῖς] τοῖς Porphyry.
[3] γενέσεως] γεννήσεως Hartman.
[4] φάσκειν Porphyry: φάσκοντας.
[5] καθαρὸν] καθάρειον Kronenberg.
[6] ὡς στέρησιν Porphyry: ὥσπερ.
[7] καὶ ταῦτα τὴν Porphyry: καὶ ταύτην.
[8] κακόνοιαν Porphyry: κακοήθειαν.
[9] ἐνυπάρχουσαν Meziriacus: ὑπάρχουσαν.
[10] μηδὲ λόγον δέχεσθαι added by Porphyry's mss.

make any progress in virtue or have any bent for it; so that I fail to see how Nature can have given them even elementary reason, seeing that they cannot achieve its end.

AUTOBULUS. But neither does this, Soclarus, seem absurd to those very opponents of ours; for while they postulate that love of one's offspring [a] is the very foundation of our social life and administration of justice, and observe that animals possess such love in a very marked degree, yet they assert and hold that animals have no part in justice. Now mules [b] are not deficient in organs; they have, in fact, genitals and wombs and are able to use them with pleasure, yet cannot attain the end of generation. Consider another approach: is it not ridiculous to keep affirming that men like Socrates and Plato [c] are involved in vice no less vicious than that of any slave you please, that they are just as foolish and intemperate and unjust, and at the same time to stigmatize the alloyed and imprecise virtue of animals as absence of reason rather than as its imperfection or weakness? And this, though they acknowledge that vice is a fault of reason and that all animals are infected with vice: many, in fact, we observe to be guilty of cowardice and intemperance, injustice and malice. He, then, who holds that what is not fitted by nature to receive the perfection of reason does not even

[a] See *Mor.* 495 c and the whole fragment, *De Amore Prolis* (493 A—497 E).

[b] *Cf.* Aristotle, *De Generatione Animal.* ii. 7 (746 b 15 ff.), ii. 8 (747 a 23 ff.); for Aristotle's criticism of Empedocles' theory see H. Cherniss, *Aristotle's Criticism of the Presocratics*, p. 143, n. 573. Pliny, *Nat. Hist.* viii. 173, mentions some cases of the fertility of mules, see also Cicero, *De Divinatione*, i. 36; ii. 49; Herodotus, iii. 151 ff.

[c] *Cf.* Cicero, *De Finibus*, iv. 21.

(962) πρῶτον μὲν οὐδὲν διαφέρει τοῦ μήτε πίθηκον αἴσχους φύσει μετέχειν μήτε χελώνην βραδυτῆτος ἀξιοῦντος, ὅτι μηδὲ κάλλους ἐπιδεκτικὰ μηδὲ τάχους ἐστίν· ἔπειτα τὴν διαφορὰν ἐμποδὼν οὖσαν οὐ συνορᾷ· λόγος μὲν γὰρ ἐγγίνεται φύσει, σπουδαῖος δὲ λόγος καὶ τέλειος ἐξ ἐπιμελείας καὶ διδασκαλίας· διὸ[1] τοῦ λογικοῦ πᾶσι τοῖς ἐμψύχοις μέτεστιν. ἣν δὲ ζητοῦσιν ὀρθότητα καὶ σοφίαν οὐδ' ἄνθρωπον εἰπεῖν κεκτημένον ἔχουσιν.[2] ὡς γὰρ[3] ὄψεως ἔστι
D πρὸς ὄψιν διαφορὰ καὶ πτήσεως πρὸς πτῆσιν (οὐ γὰρ ὁμοίως ἱέρακες βλέπουσι καὶ τέττιγες οὐδ' ἀετοὶ πέτονται καὶ πέρδικες), οὕτως οὐδὲ παντὶ λογικῷ μέτεστιν ὡσαύτως τῆς εὑρομένης[4] τὸ ἄκρον εὐστροφίας καὶ ὀξύτητος· ἐπεὶ δείγματά γε πολλὰ κοινωνίας καὶ ἀνδρείας καὶ τοῦ πανούργου περὶ τοὺς πορισμοὺς καὶ τὰς οἰκονομίας, ὥσπερ αὖ καὶ τῶν ἐναντίων, ἀδικίας δειλίας ἀβελτερίας, ἔνεστιν αὐτοῖς. καὶ μαρτυρεῖ τὸ νυνὶ πεποιηκὸς ἐν τοῖς νεανίσκοις τὴν ἅμιλλαν· ὡς γὰρ οὔσης τινὸς διαφορᾶς, οἱ μὲν τὰ χερσαῖά φασιν οἱ δὲ τὰ θαλάσσια
E μᾶλλον προῆχθαι φύσει πρὸς ἀρετήν· ὃ δὴ καὶ δῆλόν ἐστι, παραβαλλομένων πελαργοῖς ἵππων ποταμίων (οἱ μὲν γὰρ τρέφουσι τοὺς πατέρας, οἱ δ' ἀποκτιννύουσιν ἵνα τὰς μητέρας ὀχεύωσι) καὶ περι-

[1] διὸ Porphyry : διὰ.
[2] ἔχουσιν] Porphyry adds κἂν μυρίοι δὲ ὦσιν.
[3] ὡς γὰρ Meziriacus : ὥσπερ.
[4] εὑρομένης] δεχομένης Porphyry.

[a] *Cf.* Diogenes Laertius, vii. 54.
[b] *Cf.* Cicero, *De Natura Deorum*, ii. 13. 34.
[c] *Cf.* 992 D *infra.*

receive any reason at all is, in the first place, no better than one who asserts that apes are not naturally ugly or tortoises naturally slow for the reason that they are not capable of possessing beauty or speed. In the second place, he fails to observe the distinction which is right before his eyes: mere reason is implanted by nature, but real and perfect reason [a] is the product of care and education. And this is why every living creature has the faculty of reasoning; but if what they seek is true reason and wisdom, not even man may be said to possess it.[b] For as one capacity for seeing or flying differs from another (hawks and cicadas do not see alike, nor do eagles and partridges fly alike), so also not every reasoning creature has in the same way a mental dexterity or acumen that has attained perfection. For just as there are many examples in animals of social instincts and bravery and ingenuity in ways and means and in domestic arrangements, so, on the other hand, there are many examples of the opposite: injustice, cowardliness, stupidity.[c] And the very factor which brought about our young men's contest to-day provides confirmation. It is on an assumption of difference that the two sides assert, one that land animals, the other that sea animals, are naturally more advanced toward virtue. This is clear also if you contrast hippopotamuses [d] with storks [e]: the latter support their fathers, while the former kill them [f] in order to consort with their mothers. The

[d] *Cf.* Herodotus, ii. 71; Aristotle, *Historia Animal.* ii. 7 (502 a 9-15), though the latter passage may be interpolated. Porphyry reads "contrast river-horses with land-horses."

[e] *Cf.* Aristotle, *op. cit.* ix. 13 (615 b 23 ff.); Aelian, *De Natura Animal.* iii. 23: Philo, 61 (p. 129).

[f] And eat them: Aelian, *De Natura Animal.* vii. 19.

(962) στεραῖς περδίκων· οἱ μὲν γὰρ ἀφανίζουσι τὰ ᾠὰ καὶ διαφθείρουσι, τῆς θηλείας, ὅταν ἐπωάζῃ, μὴ προσδεχομένης[1] τὴν ὀχείαν, οἱ δὲ καὶ διαδέχονται τὴν ἐπιμέλειαν, ἐν μέρει θάλποντες τὰ ᾠὰ καὶ ψωμίζουσι πρότεροι τὰ νεόττια, καὶ τὴν θήλειαν, ἐὰν πλείονα χρόνον ἀποπλανηθῇ, κόπτων ὁ ἄρρην εἰσελαύνει
F πρὸς τὰ ᾠὰ καὶ τοὺς νεοττούς. ὄνοις δὲ καὶ προβάτοις Ἀντίπατρος ἐγκαλῶν ὀλιγωρίαν καθαριότητος οὐκ οἶδ' ὅπως[2] παρεῖδε τὰς λύγκας[3] καὶ τὰς χελιδόνας, ὧν αἱ μὲν ἐκτοπίζουσι παντάπασι κρύπτουσαι καὶ ἀφανίζουσαι τὸ λυγκούριον,[4] αἱ δὲ χελιδόνες ἔξω στρεφομένους διδάσκουσι τοὺς νεοττοὺς ἀφιέναι τὸ περίττωμα.[5]

Καίτοι διὰ τί δένδρου δένδρον[6] οὐ λέγομεν ἀμαθέστερον, ὡς κυνὸς πρόβατον οὐδὲ λαχάνου λάχανον
963 ἀνανδρότερον, ὡς ἔλαφον λέοντος; ἢ καθάπερ ἐν τοῖς ἀκινήτοις ἕτερον ἑτέρου βραδύτερον οὐκ ἔστιν οὐδὲ μικροφωνότερον ἐν τοῖς ἀναύδοις, οὕτως οὐδὲ δειλότερον[7] οὐδὲ νωθρότερον οὐδ' ἀκρατέστερον, οἷς[8] μὴ φύσει πᾶσιν[9] ἡ τοῦ φρονεῖν δύναμις; ἄλλοις

[1] So Porphyry: τὰς θηλείας, ὅταν ἐπωάζωσιν οὐ προσδεχομένας.
[2] οἶδ' ὅπως Nauck: οἶδα πῶς (οἶδεν ὅπως Porphyry).
[3] λύγκας Hercher: λύγγας.
[4] λυγκούριον Nauck: λυγγούριον.
[5] περίττωμα Porphyry: περίττευμα.
[6] δένδρου δένδρον Benseler: δένδρον δένδρου.
[7] δειλότερον Porphyry: δεινότερον.
[8] οἷς] ὅπου Porphyry. [9] πᾶσιν] πάρεστιν Reiske.

[a] *Cf.* Aristotle, *Historia Animal.* vi. 4 (562 b 17); Aelian, *De Natura Animal.* iii. 45.
[b] *Cf.* Aristotle, *Historia Animal.* ix. 8 (613 b 27 ff.): Aelian, *De Natura Animal.* iii. 16, and *cf.* iv. 1, 16; of peacocks in Pliny, *Nat. Hist.* x. 161.

same is true if you compare doves [a] with partridges [b]; for the partridge cock steals the eggs and destroys them since the female will not consort with him while she is sitting, whereas male doves assume a part in the care of the nest, taking turns at keeping the eggs warm and being themselves the first to feed the fledglings: and if the female happens to be away for too long a time, the male strikes her with his beak and drives her back to her eggs or squabs. And while Antipater [c] was reproaching asses and sheep for their neglect of cleanliness, I don't know how he happened to overlook lynxes and swallows [d]; for lynxes dispose of their excrement by concealing and doing away with it, while swallows teach their nestlings to turn tail and void themselves outward.

Why, moreover, do we not say that one tree is less intelligent than another, as a sheep is by comparison with a dog; or one vegetable more cowardly than another, as a stag is by comparison with a lion? Is the reason not that, just as it is impossible to call one immovable object slower than another, or one dumb thing more mute than another, so among all the creatures to whom Nature has not given the faculty of understanding, we cannot say that one is more cowardly or more slothful or more intemperate? Whereas it

[c] Von Arnim, *S.V.F.* iii. p. 251, Antipater of Tarsus, frag. 47. We know from Plutarch's *Aetia Physica*, 38 that Antipater wrote a book on animals. On the other hand, Dyroff (*Blätter f. d. Bay. Gymn.* xxiii, 1897, p. 403) argued for Antipater of Tyre: he believed, in fact, that the present work was mainly directed against this Antipater. Schuster, *op. cit.* p. 77, has shown this to be unlikely.

[d] *Cf.* Aristotle, *Historia Animal.* ix. 7 (612 b 30 f.): Plutarch, *Mor.* 727 D-E; Pliny, *Nat. Hist.* x. 92; Philo, 22 (p. 111).

(963) δ' ἄλλως κατὰ τὸ μᾶλλον καὶ ἧττον παροῦσα τὰς ὁρωμένας διαφορὰς πεποίηκεν.

5. ΣΩΚΛ. Ἀλλὰ θαυμαστὸν ὅσον ἄνθρωπος εὐμαθείᾳ[1] καὶ ἀγχινοίᾳ καὶ τοῖς περὶ δικαιοσύνην καὶ κοινωνίαν διαφέρει τῶν ζῴων.

ΑΥΤ. Καὶ γὰρ ἐκείνων, ὦ ἑταῖρε, πολλὰ τοῦτο μὲν μεγέθει καὶ ποδωκείᾳ τοῦτο δ' ὄψεως ῥώμῃ καὶ ἀκοῆς ἀκριβείᾳ πάντας ἀνθρώπους ἀπολέλοιπεν· ἀλλ' οὐ διὰ τοῦτο τυφλὸς[2] οὐδ' ἀδύνατος οὐδ' B ἄωτος[3] ὁ ἄνθρωπός ἐστιν· ἀλλὰ καὶ θέομεν εἰ καὶ βραδύτερον ἐλάφων, καὶ βλέπομεν εἰ καὶ χεῖρον ἱεράκων[4]· ἰσχύος τε καὶ μεγέθους ἡ φύσις ἡμᾶς οὐκ ἀπεστέρησεν, καίτοι τὸ μηδὲν ἐν τούτοις πρὸς ἐλέφαντα καὶ κάμηλον ὄντας. οὐκοῦν ὁμοίως μηδὲ τὰ θηρία λέγωμεν, εἰ νωθρότερον φρονεῖ καὶ κάκιον διανοεῖται, μὴ διανοεῖσθαι μηδὲ φρονεῖν ὅλως μηδὲ κεκτῆσθαι λόγον, ἀσθενῆ δὲ κεκτῆσθαι καὶ θολερόν, ὥσπερ ὀφθαλμὸν ἀμβλυώττοντα καὶ τεταραγμένον. εἰ δὲ μὴ πολλὰ τοὺς νεανίσκους αὐτίκα δὴ μάλα προσεδόκων τὸν μὲν ἐκ γῆς τὸν δ' ἐκ θαλάττης C ἐνταῦθα συνερανίσειν,[5] φιλολόγους καὶ φιλογραμμάτους ὄντας, οὐκ ἂν ἀπεσχόμην σοι[6] μυρία μὲν εὐμαθείας μυρία δ' εὐφυΐας παραδείγματα θηρίων διηγούμενος, ὧν ἄμαις καὶ σκάφαις ἡμῖν ἐκ τῶν

[1] εὐμαθείᾳ Porphyry : εὐηθείᾳ.
[2] κωφὸς οὐδὲ τυφλὸς Porphyry.
[3] οὐδ' ἄωτος omitted by Porphyry.
[4] θέομεν . . . βλέπομεν εἰ καὶ χεῖρον ἱεράκων] added from Porphyry ; the mss. of Plutarch have only χεῖρον ἱεράκων or χειρῶν καὶ ὀμμάτων.
[5] συνερανιεῖν ?
[6] σοι Bernardakis : σου.

is the presence of understanding, of one kind in one animal, of another kind in another, and in varying degree, that has produced the observable differences.

5. SOCLARUS. Yet it is astonishing how greatly man surpasses the animals in his capacity for learning and in sagacity and in the requirements of justice and social life.

AUTOBULUS. There are in fact, my friend, many animals which surpass all men, not only in bulk and swiftness, but also in keen sight and sharp hearing [a]; but for all that man is not blind or crippled or earless. We can run, if less swiftly than deer; and see, if less keenly than hawks; nor has Nature deprived us of strength and bulk even though, by comparison with the elephant and the camel, we amount to nothing in these matters.[b] In the same way, then, let us not say of beasts that they are completely lacking in intellect and understanding and do not possess reason even though their understanding is less acute and their intellect inferior to ours; what we should say is that their intellect is feeble and turbid, like a dim and clouded eye. And if I did not expect that our young men, learned and studious as they are, would very shortly present us here, one with a large collection of examples drawn from the land, the other with his from the sea, I should not have denied myself the pleasure of giving you countless examples of the docility and native capacity of beasts—of which fair Rome [c] has provided us a reservoir from which to draw in pails and buckets,

[a] *Cf.* Alexander of Aphrodisias, *De Fato*, 27; Pliny, *Nat. Hist.* viii. 10; x. 191.

[b] Pliny, *Nat. Hist.* ii. 145, reports a singular deduction from this theme; see also Seneca, *De Beneficiis*, ii. 29. 1.

[c] See, for example, 968 C, E *infra*.

(963) βασιλικῶν ἀρύσασθαι θεάτρων ἡ καλὴ Ῥώμη παρέσχηκε. ταῦτα μὲν οὖν ἐκείνοις νεαρὰ καὶ ἄθικτα πρὸς τὸν λόγον ἐγκαλλωπίσασθαι καταλείπωμεν.

Βούλομαι δὲ μικρόν τι μετὰ σοῦ σκέψασθαι καθ' ἡσυχίαν. οἶμαι γὰρ ἰδίαν τινὰ μέρους ἑκάστου καὶ δυνάμεως φαυλότητα καὶ πήρωσιν εἶναι καὶ νόσον, ὥσπερ ὀφθαλμοῦ τυφλότητα καὶ σκέλους χωλότητα καὶ ψελλότητα γλώσσης, ἄλλου δὲ μηδενός· οὐ γὰρ ἔστι τυφλότης μὴ πεφυκότος ὁρᾶν οὐδὲ χωλότης μὴ πεφυκότος βαδίζειν, ψελλόν τε τῶν ἀγλώσσων D ἢ τῶν ἀναύδων φύσει τραυλὸν οὐδὲν ἂν προσείποις· οὐκοῦν οὐδὲ παραπαῖον ἢ παραφρονοῦν ἢ μαινόμενον, ᾧ μὴ τὸ φρονεῖν καὶ[1] διανοεῖσθαι καὶ λογίζεσθαι κατὰ φύσιν ὑπῆρχεν· οὐ γὰρ ἔστιν ἐν πάθει[2] γενέσθαι μὴ κεκτημένον δύναμιν ἧς τὸ πάθος ἢ στέρησις ἢ πήρωσις ἤ τις ἄλλη κάκωσις ἦν.[3] ἀλλὰ μὴν ἐντετύχηκάς γε λυττώσαις κυσίν, ἐγὼ δὲ[4] καὶ ἵπποις· ἔνιοι δέ φασι καὶ βοῦς μαίνεσθαι καὶ ἀλώπεκας· ἀρκεῖ δὲ τὸ τῶν κυνῶν, ὃ ἀναμφισβήτητόν ἐστι, καὶ μαρτυρεῖ λόγον ἔχειν καὶ διάνοιαν οὐ φαύλην τὸ ζῷον, ἧς ταραττομένης καὶ συγχεομένης E ἡ λεγομένη λύττα καὶ μανία πάθος ἐστίν· οὔτε γὰρ ὄψιν ἀλλοιουμένην αὐτῶν[5] οὔτ' ἀκοὴν ὁρῶμεν· ἀλλ' ὥσπερ ἀνθρώπου μελαγχολῶντος ἢ παρακόπτοντος ὁ μὴ λέγων ἐξεστάναι καὶ διεφθορέναι τὸ φρονοῦν καὶ λογιζόμενον καὶ μνημονεῦον ἄτοπός ἐστι (καὶ γὰρ ἡ συνήθεια ταῦτά γε κατηγορεῖ τῶν παρα-

[1] καὶ Porphyry : ἢ.
[2] ἐν πάθει Porphyry : εὐπαθὲς.
[3] ἦν] ἐστιν Porphyry.
[4] ἐγὼ δὲ] ἔτι δὲ Porphyry. [5] αὐτοῖς Porphyry.

[a] So too, perhaps, wolves in Theocritus, iv. 11.

as it were, from the imperial spectacles. Let us leave this subject, therefore, fresh and untouched for them to exercise their art upon in discourse.

There is, however, one small matter which I should like to discuss with you quietly. It is my opinion that each part and faculty has its own particular weakness or defect or ailment which appears in nothing else, as blindness in the eye, lameness in the leg, stuttering in the tongue. There can be no blindness in an organ which was not created to see, or lameness in a part which was not designed for walking; nor would you ever describe an animal without a tongue as stuttering, or one voiceless by nature as inarticulate. And in the same way you would not call delirious or witless or mad anything that was not endowed by Nature with reason or intelligence or understanding; for it is impossible to ail where you have no faculty of which the ailment is a deficiency or loss or some other kind of impairment. Yet certainly you have encountered mad dogs, and I have also known of mad horses; and there are some who say that cattle and foxes also go mad.[a] But dogs will do, since no one questions the fact in their case, which provides evidence that the creature possesses reason and a by no means despicable intellectual faculty. What is called rabies and madness is an ailment of that faculty when it becomes disturbed and disordered. For we observe no derangement either of the dogs' sight or of their hearing; yet, just as when a human being suffers from melancholy or insanity, anyone is absurd who does not admit that it is the organ that thinks and reasons and remembers which has been displaced or damaged (we habitually say, in fact, of madmen that they "are

(963) φρονούντων μὴ εἶναι παρ' αὐτοῖς ἀλλ' ἐκπεπτωκέναι τῶν λογισμῶν), οὕτως ὁ τοὺς λυττῶντας κύνας ἄλλο τι πεπονθέναι νομίζων ἀλλ' οὐχὶ τῷ φρονεῖν πεφυκότι[1] καὶ λογίζεσθαι καὶ μνημονεύειν ἀναπεπλησμένους ταραχῆς καὶ παραπεπαικότας
F ἀγνοεῖν τὰ φίλτατα πρόσωπα καὶ φεύγειν τὰς συντρόφους διαίτας, ἢ παρορᾶν τὸ φαινόμενον ἔοικεν ἢ συνορῶν[2] τὸ γινόμενον ἐξ αὐτοῦ φιλονεικεῖν πρὸς τὴν ἀλήθειαν.

6. ΣΟΚΛ. Ὀρθῶς μοι δοκεῖς ὑπονοεῖν· οἱ γὰρ ἀπὸ τῆς Στοᾶς καὶ τοῦ Περιπάτου μάλιστα πρὸς τοὐναντίον ἐντείνονται τῷ λόγῳ, τῆς δικαιοσύνης τότ' ἂν[3] γένεσιν οὐκ ἐχούσης, ἀλλὰ παντάπασιν
964 ἀσυστάτου καὶ ἀνυπάρκτου γινομένης, εἰ πᾶσι τοῖς ζῴοις λόγου μέτεστι· γίνεται γὰρ ἢ τὸ ἀδικεῖν ἀναγκαῖον ἡμῖν ἀφειδοῦσιν αὐτῶν, ἢ μὴ χρωμένοις[4] τὸ ζῆν ἀδύνατον καὶ ἄπορον· καὶ τρόπον τινὰ θηρίων βίον βιωσόμεθα, τὰς ἀπὸ τῶν θηρίων προέμενοι χρείας. ἀφίημι γὰρ Νομάδων καὶ Τρωγλοδυτῶν ἀνεξευρέτους ἀριθμῷ μυριάδας, οἷ τροφὴν σάρκας ἄλλο δ' οὐδὲν ἴσασιν· ἀλλ' ἡμῖν τοῖς ἡμέρως καὶ φιλανθρώπως ζῆν δοκοῦσι ποῖον ἔργον ἀπολείπεται γῆς, ποῖον ἐν θαλάττῃ, τίς ἐναέριος[5] τέχνη, τίς κόσμος διαίτης, ἂν ὡς προσήκει λογικοῖς καὶ ὁμοφύλοις πᾶσι τοῖς ζῴοις οὖσιν ἀβλαβῶς
B καὶ μετ' εὐλαβείας προσφέρεσθαι μάθωμεν, ἔργον ἐστὶν εἰπεῖν. οὐδὲν οὖν φάρμακον οὐδ' ἴαμα τῆς

[1] τοῦ φρονεῖν πεφυκότος . . . ἀναπεπλησμένου . . . παραπεπτωκότος (leg. παραπεπαικότος) Porphyry.
[2] ἢ συνορῶν Porphyry : μὴ συνορῶν.
[3] τότ' ἂν W. C. H. after Post (ἔτ' ἂν) : ἑτέραν.
[4] χρωμένοις Porphyry : χρωμένων αὐτοῖς.
[5] ἐναέριος Post : ἐν ὄρεσι (ἐναργὴς Porphyry).

not themselves," but have "fallen out of their wits"), just so, whoever believes that rabid dogs have any other ailment than an affliction of their natural organ of judgement and reason and memory so that, when this has become infected with disorder and insanity, they no longer recognize beloved faces and shun their natural haunts—such a man, I say, either must be disregarding the evidence or, if he does take note of the conclusion to which it leads, must be quarrelling with the truth.[a]

6. SOCLARUS. Your inference seems quite justified. For the Stoics[b] and Peripatetics strenuously argue on the other side, to the effect that justice could not then come into existence, but would remain completely without form or substance, if all the beasts partake of reason. For[c] either we are necessarily unjust if we do not spare them; or, if we do not take them for food, life becomes impracticable or impossible; in a sense we shall be living the life of beasts once we give up the use of beasts.[d] I omit the numberless hosts of Nomads and Troglodytes who know no other food but flesh. As for us who believe our lives to be civilized and humane, it is hard to say what pursuit on land or sea, what aerial art,[e] what refinement of living, is left to us if we are to learn to deal innocently and considerately with all creatures, as we are bound to if they possess reason and are of one stock with us. So we have no help or

[a] The Stoics again: *cf.* Galen, *De Hippocratis et Platonis Placitis*, v. 1 (p. 431 Kühn).

[b] Von Arnim, *S.V.F.* iii, p. 90.

[c] From this point to the end of chapter 6 (964 C) the text is quoted by Porphyry, *De Abstinentia*, i. 4-6 (pp. 88-89, ed. Nauck): *cf.* the note on 959 F *supra*.

[d] *Cf. Mor.* 86 D.

[e] That is beasts, fish, and fowl in earth, sea, and air.

(964) ἢ τὸν βίον ἀναιρούσης ἢ τὴν δικαιοσύνην ἀπορίας ἔχομεν,[1] ἂν μὴ τὸν ἀρχαῖον ὅρον καὶ νόμον φυλάττωμεν, ᾧ καθ' Ἡσίοδον ὁ[2] τὰς φύσεις διελὼν καὶ θέμενος ἰδίᾳ τῶν γενῶν ἑκάτερον

ἰχθύσι μὲν καὶ θηρσὶ καὶ οἰωνοῖς πετεηνοῖς
ἔσθειν ἀλλήλους, ἐπεὶ οὐ δίκη ἔστι μετ' αὐτοῖς,
ἀνθρώποισι δ' ἔδωκε δίκην

πρὸς ἀλλήλους. οἷς δ' οὐκ ἔστι τὸ[3] δικαιοπραγεῖν πρὸς ἡμᾶς, οὐδ' ἡμῖν πρὸς ἐκεῖνα γίνεται τὸ ἀδικεῖν· ὡς οἵ γε τοῦτον προέμενοι τὸν λόγον οὔτ'
C εὐρεῖαν[4] ἄλλην οὔτε λιτὴν[5] τῇ δικαιοσύνῃ παρεισελθεῖν ὁδὸν ἀπολελοίπασι.

7. ΑΥΤ. Ταῦτα μέν, ὦ φίλε "τἀπὸ καρδίας"[6] ἐξείρηκας· οὐ μὴν δοτέον, ὥσπερ δυστοκούσαις γυναιξί, περιάψασθαι τοῖς φιλοσόφοις ὠκυτόκιον, ἵνα ῥᾳδίως καὶ ἀταλαιπώρως τὸ δίκαιον ἡμῖν ἀποτέκωσιν. οὐδὲ γὰρ αὐτοὶ τῷ Ἐπικούρῳ διδόασιν ὑπὲρ τῶν μεγίστων σμικρὸν οὕτω πρᾶγμα καὶ φαῦλον, ἄτομον παρεγκλῖναι μίαν ἐπὶ τοὐλάχιστον, ὅπως ἄστρα καὶ ζῷα κατὰ τύχην[7] παρεισέλθῃ καὶ τὸ ἐφ' ἡμῖν μὴ ἀπόληται· δεικνύναι δὲ τὸ ἄδηλον ἢ λαμβάνειν τι τῶν προδήλων κελεύουσι

[1] ἔχομεν Dübner: οὐδὲν ἔχομεν.
[2] ὁ] ὁ Ζεὺς Porphyry: omitted by most mss.
[3] τὸ Porphyry: τι.
[4] οὔτ' εὐρεῖαν Porphyry: οὔτε χρείαν.
[5] λιτὴν] λεπτὴν Porphyry.
[6] καρδίας W. C. H.: καρδίας τῶν ἀνδρῶν.
[7] κατὰ τύχην Sandbach: καὶ τύχῃ.

[a] *Works and Days*, 277-279; *cf.* Aelian, *De Natura Animal.* vi. 50; Mair on Oppian, *Hal.* ii. 43.

cure for this dilemma which either deprives us of life itself or of justice, unless we do preserve that ancient limitation and law by which, according to Hesiod,[a] he who distinguished the natural kinds and gave each class its special domain :

> To fish and beasts and winged birds allowed
> Licence to eat each other, for no right
> Exists among them ; right, he gave to men

for dealing with each other. Those who know nothing of right action toward us can receive no wrong from us either.[b] For those who have rejected this argument have left no path, either broad or narrow, by which justice may slip in.

7. AUTOBULUS. This, my friend, has been spoken "from the heart."[c] We certainly must not allow philosophers, as though they were women in difficult labour, to put about their necks a charm for speedy delivery so that they may bring justice to birth for us easily and without hard labour. For they themselves do not concede to Epicurus,[d] for the sake of the highest considerations, a thing so small and trifling as the slightest deviation of a single atom—which would permit the stars and living creatures to slip in by chance and would preserve from destruction the principle of free will. But, seeing that they bid him demonstrate whatever is not obvious or take as his starting-point something that is obvious, how are they

[b] This seems to have been Plutarch's own attitude toward the question, at least later on in life: see *Life of Cato Maior*, v. 2 (339 A).

[c] *Cf.* Euripides, frag. 412 (Nauck, *Trag. Graec. Frag.* p. 486): quoted more completely in *Mor.* 63 A.

[d] Usener, *Epicurea*, p. 351: see Bailey on Lucretius, ii. 216 ff.: *Mor.* 1015 B-C.

(964) πῶς[1] καὶ προσήκει τὸ περὶ τῶν ζῴων ὑποτίθεσθαι πρὸς τὴν δικαιοσύνην, εἰ μήθ' ὁμολογεῖται μήτ'
D ἄλλως ἀποδεικνύουσιν; ἔχει γὰρ ἑτέραν ὁδὸν ἐκεῖ τὸ δίκαιον οὐ σφαλερὰν καὶ παράκρημνον οὕτω καὶ διὰ τῶν ἐναργῶν ἀνατρεπομένων[2] ἄγουσαν, ἀλλ' ἥν, Πλάτωνος ὑφηγουμένου, δείκνυσιν οὑμὸς υἱός, ὦ Σώκλαρε, σὸς δ' ἑταῖρος, τοῖς μὴ φιλομαχεῖν ἕπεσθαι δὲ καὶ μανθάνειν βουλομένοις. ἐπεὶ τό γε μὴ παντάπασι καθαρεύειν ἀδικίας τὸν ἄνθρωπον οὕτω τὰ ζῷα μεταχειριζόμενον Ἐμπεδοκλῆς καὶ Ἡράκλειτος ὡς ἀληθὲς προσδέχονται, πολλάκις ὀδυρόμενοι καὶ λοιδοροῦντες τὴν φύσιν, ὡς ἀνάγκην καὶ
E πόλεμον οὖσαν, ἀμιγὲς δὲ μηδὲν μηδ' εἰλικρινὲς ἔχουσαν ἀλλὰ διὰ πολλῶν κἀδίκων[3] παθῶν περαινομένην· ὅπου καὶ τὴν γένεσιν αὐτὴν ἐξ ἀδικίας συντυγχάνειν λέγουσι, τῷ θνητῷ συνερχομένου τοῦ ἀθανάτου, καὶ τρέφεσθαι[4] τὸ γεννώμενον[5] παρὰ φύσιν μέλεσι[6] τοῦ γεννήσαντος ἀποσπωμένοις.

Οὐ μὴν ἀλλὰ ταῦτα μὲν ἄκρατα καὶ πικρὰ φαίνεται κατακόρως· ἑτέρα δ' ἐστὶν ἐμμελὴς παρηγορία, μήτε τῶν ζῴων τὸν λόγον ἀφαιρουμένη καὶ σῴζουσα χρωμένων αὐτοῖς ὡς[7] προσήκει τὸ δίκαιον· ἣν τῶν σοφῶν καὶ παλαιῶν εἰσαγόντων[8] συστᾶσα λαιμαργία μεθ' ἡδυπαθείας ἐξέβαλε καὶ ἠφάνισεν,

[1] κελεύουσι πῶς added by Sandbach after Usener.
[2] ἀνατρεπομένων Meziriacus : ἀνατρεπόμενον.
[3] κἀδίκων Leonicus : καὶ δικαίων.
[4] τρέφεσθαι Meziriacus : τέρπεσθαι.
[5] γεννώμενον Reiske : γενόμενον.
[6] μέλεσι] μέρεσι Emperius.
[7] ὡς Meziriacus : πῶς.
[8] εἰσαγαγόντων Emperius.

[a] That they are irrational.
[b] For this difficult and corrupt passage the admirable

in any position to make this statement about animals [a] a basis of their own account of justice, when it is neither generally accepted nor otherwise demonstrated by them? [b] For justice has another way to establish itself, a way which is neither so treacherous nor so precipitous, nor is it a route lined with the wreckage of obvious truths. It is the road which, under the guidance of Plato,[c] my son and your companion,[d] Soclarus, points out to those who have no love of wrangling, but are willing to be led and to learn. For certain it is that Empedocles [e] and Heraclitus [f] accept as true the charge that man is not altogether innocent of injustice when he treats animals as he does; often and often do they lament and exclaim against Nature, declaring that she is "Necessity" and "War," that she contains nothing unmixed and free from tarnish, that her progress is marked by many unjust inflictions. As an instance, say, even birth itself springs from injustice, since it is a union of mortal with immortal, and the offspring is nourished unnaturally on members torn from the parent.

These strictures, however, seem to be unpalatably strong and bitter; for there is an alternative, an inoffensive formula which does not, on the one hand, deprive beasts of reason, yet does, on the other, preserve the justice of those who make fit use of them. When the wise men of old had introduced this, gluttony joined luxury to cancel and annul it; Pytha-

exposition and reconstruction of F. H. Sandbach (*Class. Quart.* xxxv, p. 114) has been followed.

[c] *Laws*, 782 c. [d] Plutarch himself; *cf. Mor.* 734 E.

[e] Diels-Kranz, *Frag. der Vorsok.* i, p. 366, frag. B 135; and see Aristotle, *Rhetoric*, i. 13. 2 (1373 b 14).

[f] Diels-Kranz, *op. cit.* i, p. 169, frag. B 80; Bywater, frag. 62.

(964) αὖθις δὲ Πυθαγόρας ἀνελάμβανε, διδάσκων ὠφελεῖ-
F σθαι μὴ ἀδικοῦντας· οὐ γὰρ ἀδικοῦσιν οἱ τὰ μὲν ἄμικτα καὶ βλαβερὰ κομιδῇ κολάζοντες καὶ ἀποκτιννύοντες, τὰ δ' ἥμερα καὶ φιλάνθρωπα ποιούμενοι τιθασὰ καὶ συνεργὰ χρείας, πρὸς ἣν ἕκαστον εὖ πέφυκεν,

> ἵππων ὄνων τ' ὀχεῖα[1] καὶ ταύρων γονάς,

ὧν ὁ Αἰσχύλου Προμηθεὺς "δοῦναι" φησὶν ἡμῖν

965 > ἀντίδουλα καὶ πόνων ἐκδέκτορα·

κυσὶ δὲ χρώμενοι προφυλάττουσιν, αἶγάς τε καὶ οἶς ἀμελγομένας καὶ κειρομένας[2] νέμοντες. οὐ γὰρ ἀναιρεῖται τὸ ζῆν οὐδὲ βίος ἀπόλλυται τοῖς ἀνθρώποις, ἂν μὴ λοπάδας ἰχθύων μηδ' ἥπατα χηνῶν ἔχωσι μηδὲ βοῦς μηδ' ἐρίφους κατακόπτωσιν ἐπ' εὐωχίᾳ, μηδ' ἀλύοντες ἐν θεάτροις μηδὲ παίζοντες ἐν θήραις τὰ μὲν ἀναγκάζωσι τολμᾶν ἄκοντα καὶ μάχεσθαι, τὰ δὲ μηδ' ἀμύνεσθαι πεφυκότα διαφθείρωσι. τὸν γὰρ παίζοντα καὶ τερπόμενον οἶμαι συμπαίζουσι δεῖν χρῆσθαι καὶ ἱλαροῖς, οὐχ ὥσπερ

[1] τ' ὀχεῖα *Mor.* 98 c: τε ὀχείαν.
[2] ἀμελγομένας καὶ κειρομένας Reiske: ἀμελγόμενα καὶ κειρόμενα.

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[a] *Cf.* 959 F *supra*; *Mor.* 729 E; frag. xxxiv. 145 (vol. VII, p. 169 Bernardakis).
[b] *Cf., e.g.*, Plato, *Republic*, 352 E.
[c] From the *Prometheus Unbound*, frag. 194 (Nauck, *Trag. Graec. Frag.* p. 65); quoted again in *Mor.* 98 c.
[d] "There are significant undercurrents here. Of the animals domesticated by man, Plutarch first mentions only the horse, the ass, and the ox, noting their employment as

goras,[a] however, reintroduced it, teaching us how to profit without injustice. There is no injustice, surely, in punishing and slaying animals that are anti-social and merely injurious, while taming those that are gentle and friendly to man and making them our helpers in the tasks for which they are severally fitted by nature [b]:

Offspring of horse and ass and seed of bulls

which Aeschylus' [c] Prometheus says that he bestowed on us

To serve us and relieve our labours ;

and thus we make use of dogs as sentinels and keep herds of goats and sheep that are milked and shorn.[d] For living is not abolished nor life terminated when a man has no more platters of fish or pâté de foie gras or mincemeat of beef or kids' flesh for his banquets [e] —or when he no longer, idling in the theatre or hunting for sport, compels some beasts against their will to stand their ground and fight, while he destroys others which have not the instinct to fight back even in their own defence. For I think sport should be joyful and between playmates who are merry on

servants of man, not as sources of food. Next come dogs, then goats and sheep. The key factor is that in the early period the cow, the sheep, and the goat were too valuable as sources of milk and wool to be recklessly slaughtered for the sake of their meat. The pig was the only large domestic animal useful almost solely as a source of meat " (Andrews).

[e] " Plutarch's choice of examples of table luxury is apt. The enthusiasm of many Greek epicures for fish scandalized conservative philosophers. Pâté de foie gras ranked high as a delicacy, more especially in the Roman period ; the mincemeat mentioned is surely the Roman *isicia*, dishes with finely minced beef or pork as the usual basis, many recipes for which appear in Apicius " (Andrews).

(965) B ὁ Βίων ἔλεγε τὰ παιδάρια παίζοντα τῶν βατράχων τοῖς λίθοις ἐφίεσθαι, τοὺς δὲ βατράχους μηκέτι παίζοντας ἀλλ' ἀληθῶς ἀποθνήσκειν, οὕτω κυνηγεῖν καὶ ἁλιεύειν, ὀδυνωμένοις τερπομένους καὶ ἀποθνήσκουσι, τοῖς δ' ἀπὸ σκύμνων καὶ νεοσσῶν ἐλεεινῶς ἀγομένοις. οὐ γὰρ οἱ χρώμενοι ζῴοις ἀδικοῦσιν, ἀλλ' οἱ χρώμενοι βλαβερῶς καὶ ὀλιγώρως καὶ μετ' ὠμότητος.

8. ΣΩΚΛ. Ἐπίσχες, ὦ Αὐτόβουλε, καὶ παραβαλοῦ τὸ θυρίον[1] τῆς κατηγορίας· ἐγγὺς γὰρ οἵδε προσιόντες πολλοὶ καὶ θηρατικοὶ πάντες, οὓς οὔτε μεταθεῖναι ῥᾴδιον οὔτε λυπεῖν ἀναγκαῖον.

ΑΥΤ. Ὀρθῶς παραινεῖς· ἀλλ' Εὐβίοτον[2] μὲν εὖ C οἶδα καὶ τὸν ἐμὸν ἀνεψιὸν Ἀρίστωνα, τούς τε Διονυσίου παῖδας ἀπὸ Δελφῶν,[3] Αἰακίδην καὶ Ἀριστότιμον τοῦτον, εἶτα Νίκανδρον τὸν Εὐθυδάμου, χερσαίας "δαήμονας"[4] ἄγρας ὡς Ὅμηρος ἔφη, καὶ διὰ τοῦτο πρὸς Ἀριστοτίμου[5] γενησομένους· ὥσπερ αὖ πάλιν τούσδε τοὺς νησιώτας καὶ παραλίους, Ἡρακλέωνα τὸν Μεγαρόθεν καὶ Φιλόστρατον τὸν Εὐβοέα, "τοῖσι[6] θαλάσσια ἔργα μέμηλε," Φαίδιμος ἔχων περὶ αὐτὸν βαδίζει.

Τυδείδην δ' οὐκ ἂν γνοίης ποτέροισι μετείη,

τουτονὶ τὸν ἡμέτερον ἡλικιώτην Ὀπτᾶτον, ὃς "πολ-

[1] τὸ θυρίον added by Salmasius, *cf. Mor.* 940 F.
[2] Εὐβίοτον Hatzidakis and Crönert: εὐβίωτον.
[3] Δελφῶν Leonicus: ἀδελφῶν.
[4] δαήμονας Reiske: δαήμονα.
[5] πρὸς Ἀριστοτίμου Pohlenz: ἀριστότιμον.
[6] τοῖσι Reiske: τοῖσί τε.

[a] Bion and Xenocrates were almost alone among the Greeks in expressing pity for animals.

both sides, not the sort of which Bion[a] spoke when he remarked that boys throw stones at frogs for fun, but the frogs don't die for "fun," but in sober earnest.[b] Just so, in hunting and fishing, men amuse themselves with the suffering and death of animals, even tearing some of them piteously from their cubs and nestlings. The fact is that it is not those who make use of animals who do them wrong, but those who use them harmfully and heedlessly and in cruel ways.

8. SOCLARUS. Restrain yourself, Autobulus, and turn off the flow of these accusations.[c] I see a good many gentlemen approaching who are all hunters; you will hardly convert them and you needn't hurt their feelings.

AUTOBULUS. Thanks for the warning. Eubiotus, however, I know quite well and my cousin Ariston, and Aeacides and Aristotimus here, the sons of Dionysius of Delphi, and Nicander, the son of Euthydamus, all of them "expert," as Homer[d] expresses it, in the chase by land—and for this reason they will be on Aristotimus' side. So too yonder comes Phaedimus with the islanders and coast-dwellers about him, Heracleon from Megara and the Euboean Philostratus,

> Whose hearts are on deeds of the sea.[e]

And here is my contemporary Optatus: like Diomedes, it is

> Hard to tell the side on which he ranges,[f]

[b] See Hartman, *De Plutarcho*, p. 571; [Aristotle], *Eud. Eth.* vii. 10. 21 (1243 a 20).

[c] *Cf. Mor.* 940 F *supra*. Possibly a reference to the water-clock used in the courts.

[d] *Odyssey*, viii. 159.

[e] *Cf.* Homer, *Iliad*, ii. 614; *Odyssey*, v. 67.

[f] Homer, *Iliad*, v. 85.

(965) λοῖς μὲν ἐνάλου ὀρείου δὲ πολλοῖς[1] ἄγρας ἀκροθινίοις ἀγλαΐσας" τὴν Ἀγροτέραν ἅμα θεὸν καὶ
D Δίκτυνναν, ἐνταῦθα δῆλός ἐστι πρὸς ἡμᾶς βαδίζων, ὡς μηδετέροις προσθήσων ἑαυτόν· ἢ φαύλως εἰκάζομεν, ὦ φίλε Ὀπτᾶτε, κοινόν σε καὶ μέσον ἔσεσθαι τῶν νεανίσκων βραβευτήν;

ΟΠΤΑΤΟΣ. Πάνυ μὲν οὖν ὀρθῶς ὑπονοεῖς, ὦ Αὐτόβουλε· πάλαι γὰρ ὁ Σόλωνος ἐκλέλοιπε νόμος, τοὺς ἐν στάσει μηδετέρῳ μέρει προσγενομένους κολάζων.

ΑΥΤ. Δεῦρο δὴ καθίζου πρὸς ἡμᾶς ὅπως, εἰ δεήσει μάρτυρος, μὴ τοῖς Ἀριστοτέλους πράγματα
E βιβλίοις παρέχωμεν, ἀλλὰ σοὶ δι' ἐμπειρίαν ἑπόμενοι τοῖς λεγομένοις ἀληθῶς τὴν ψῆφον ἐπιφέρωμεν.

ΣΩΚΛ. Εἶεν, ὦ ἄνδρες νέοι, γέγονέ τις ὑμῖν ὁμολογία περὶ τάξεως ;

ΦΑΙΔΙΜΟΣ. Γέγονεν, ὦ Σώκλαρε, πολλὴν παρασχοῦσα φιλονεικίαν· εἶτα κατ' Εὐριπίδην

ὁ τῆς τύχης παῖς κλῆρος

ἐπὶ τούτῳ ταγεὶς τὰ χερσαῖα προεισάγει δίκαια[2] τῶν ἐνάλων.

ΣΩΚΛ. Καιρὸς οὖν, ὦ Ἀριστότιμε, σοὶ μὲν ἤδη λέγειν, ἡμῖν δ' ἀκούειν.

[1] ὀρείου δὲ πολλοῖς Dübner : ὀρείου πολλάκις.
[2] προεισάγειν δικαιοῖ Hutten and Reiske.

[a] Verses of an unknown poet, as recognized by Hubert.

[b] Artemis ; on the combined cults see Farnell, *Cults of the Greek States*, ii, pp. 425 ff.

[c] *Life of Solon*, xx. 1 (89 A-B) ; *Mor.* 550 C, 823 F ; Aristotle, *Constitution of Athens*, viii. 5. A fairly well attested law, but " the name of Solon is used as the collective

for "with many a trophy from the sea, many likewise from the chase on the mountain, he has glorified"[a] the goddess[b] who is at once the Huntress and Dictynna. It is evident that he is coming to join us with no intention of attaching himself to either side. Or am I wrong, my dear Optatus, in supposing that you will be an impartial and neutral umpire between the young men?

OPTATUS. It is just as you suppose, Autobulus. Solon's[c] law, which used to punish those who adhered to neither side in a factious outbreak, has long since fallen into disuse.

AUTOBULUS. Come over here, then, and take your place beside us so that, if we need evidence, we shall not have to disturb the tomes of Aristotle,[d] but may follow you as expert and return a true verdict on the arguments.

SOCLARUS. Well then, my young friends, have you reached any agreement on procedure?

PHAEDIMUS. We have, Soclarus, though it occasioned considerable controversy; but at length, as Euripides[e] has it,

> The lot, the child of chance,

made arbiter, admits into court the case of the land animals before that of creatures from the sea.

SOCLARUS. The time has come, then, Aristotimus, for you to speak and us to hear.

term for the legislative activity of the past" (Linforth, *Solon the Athenian*, p. 283). The penalty was disfranchisement. Lysias, xxxi, shows that this law was unknown in his time.

[d] The zoological works, such as the *Natural History* and the *Generation of Animals*, which once extended to fifty volumes (Pliny, *Nat. Hist.* viii. 44).

[e] Nauck, *Trag. Graec. Frag.* p. 678, frag. 989; *cf. Mor.* 644 D.

(965) 9. ΑΡΙΣΤΟΤΙΜΟΣ. Ἡ μὲν ἀγορὰ τοῖς δικαζομένοις . . .[1] τὰ δὲ τὸν γόνον ἀναλίσκει περὶ τὰς ἀποκυήσεις ἐπιτρέχοντα τοῖς θήλεσι.

Κεστρέως δὲ γένος, οὓς περαίας[2] καλοῦσιν, ἀπὸ τῆς μύξης τρέφονται τῆς ἑαυτῶν· ὁ δὲ πολύπους αὑτὸν ἐσθίων κάθηται χειμῶνος

ἔν τ' ἀπύρῳ οἴκῳ καὶ ἐν ἤθεσι λευγαλέοισιν·

οὕτως ἀργὸς ἢ ἀναίσθητος ἢ γαστρίμαργος ἢ πᾶσι τούτοις ἔνοχός ἐστι. διὸ καὶ Πλάτων αὖ πάλιν
F ἀπεῖπε νομοθετῶν, μᾶλλον δ' ἀπεύξατο τοὺς νέους "θαλαττίου θήρας ἔρωτα λαβεῖν"· οὐδὲν γὰρ ἀλκῆς γυμνάσιον οὐδὲ μελέτημα σοφίας οὐδ' ὅσα πρὸς ἰσχὺν ἢ τάχος ἢ κινήσεις διαπονοῦσιν ἐν[3] τοῖς πρὸς λάβρακας ἢ γόγγρους ἢ σκάρους ἀγῶσιν·
966 ὥσπερ ἐνταῦθα τὰ μὲν θυμοειδῆ τὸ φιλοκίνδυνον καὶ τὸ ἀνδρεῖον ἀσκεῖ τῶν μαχομένων, τὰ δὲ πανοῦργα τὸ φροντιστικὸν καὶ συνετὸν τῶν ἐπιτιθεμένων, τὰ δὲ ποδώκη τὸ ῥωμαλέον καὶ φιλόπονον τῶν διωκόντων. καὶ ταῦτα τὸ κυνηγεῖν καλὸν πεποίηκε· τὸ δ' ἁλιεύειν ἀπ' οὐδενὸς ἔνδοξον· οὐδέ

[1] Lacuna indicated by Leonicus.
[2] περαίας Aristotle (*Historia Animal.* 591 a 24): παρδίας.
[3] ἐν added by Hartman.

[a] Here follows a long lacuna not indicated in the mss., the contents of which cannot even be conjectured.
[b] The milt is, of course, for the fertilization of the eggs, as Aristotimus should have learned from Aristotle (*e.g.*, *Historia Animal.* vi. 13, 567 b 3 ff.)
[c] On this type *cf.* also Aristotle, *Historia Animal.* viii. 2

9. ARISTOTIMUS. The court is open for the litigants . . .[a] And there are some fish that waste their milt by pursuing the female while she is laying her eggs.[b]

There is also a type of mullet called the grayfish[c] which feeds on its own slime[d]; and the octopus sits through the winter devouring himself,

> In fireless home and domicile forlorn,[e]

so lazy or insensible or gluttonous, or guilty of all of these charges, is he. So this also is the reason, again, why Plato[f] in his *Laws* enjoined, or rather prayed, that his young men might not be seized by "a love for sea hunting." For there is no exercise in bravery or training in skill or anything that contributes to strength or fleetness or agility when men endure toil in contests with bass or conger or parrot-fish; whereas, in the chase on land, brave animals give play to the courageous and danger-loving qualities of those matched against them, crafty animals sharpen the wits and cunning of their attackers, while swift ones train the strength and perseverance of their pursuers. These are the qualities which have made hunting a noble sport, whereas there is nothing

(591 a 23) and in Athenaeus, vii. 307 a, where variants of the name occur. "The same name was applied to a type of shark as well as to a type of mullet, an apt application in both instances" (Andrews).

[d] See Mair on Oppian, *Hal.* ii. 643 (*cf.* iii. 432 ff.). Pliny (*Nat. Hist.* ix. 128, 131) tells the same story of the purplefish.

[e] Hesiod, *Works and Days*, 524; *cf.* 978 F *infra* and the note; *Mor.* 1059 E; Aelian, *De Natura Animal.* i. 27, xiv. 26. See also Thompson on Aristotle, *Historia Animal.* viii. 2 (591 a 5); Mair on Oppian, *Hal.* ii. 244; Lucilius, frag. 925 Warmington (L.C.L.).

[f] *Laws*, 823 D-E.

(966) γε θεῶν τις ἠξίωσεν, ὦ ἑταῖρε, "γογγροκτόνος," ὥσπερ ὁ Ἀπόλλων "λυκοκτόνος," οὐδὲ "τριγλοβόλος," ὥσπερ "ἐλαφηβόλος" ἡ Ἄρτεμις, λέγεσθαι. καὶ τί θαυμαστόν, ὅπου καὶ ἀνθρώπῳ σῦν μὲν[1] καὶ ἔλαφον καὶ νὴ Δία δορκάδα καὶ λαγωὸν ἑλεῖν κάλλιον ἢ πρίασθαι; θύννον δὲ καὶ κολίαν[2] καὶ ἀμίαν σεμνότερόν ἐστιν ὀψωνεῖν ἢ αὐτὸν[3]
B ἁλιεύειν. τὸ γὰρ ἀγεννὲς καὶ ἀμήχανον ὅλως καὶ ἀπάνουργον αὐτῶν αἰσχρὰν[4] καὶ ἄζηλον καὶ ἀνελεύθερον τὴν ἄγραν πεποίηκε.

10. Καθόλου δέ, ἐπεὶ δι' ὧν οἱ φιλόσοφοι δεικνύουσι τὸ[5] μετέχειν λόγου τὰ ζῷα, προθέσεις εἰσὶ καὶ παρασκευαὶ καὶ μνῆμαι καὶ πάθη καὶ τέκνων ἐπιμέλειαι καὶ χάριτες εὖ παθόντων καὶ μνησικακίαι πρὸς τὸ λυπῆσαν, ἔτι δ' εὑρέσεις τῶν ἀναγκαίων, ἐμφάσεις ἀρετῆς, οἷον ἀνδρείας κοινωνίας ἐγκρατείας μεγαλοφροσύνης· σκοπῶμεν τὰ ἔναλα, εἰ τούτων ἐκεῖνα μὲν οὐδὲν ἤ πού τι παντελῶς ἀμαυρὸν αἴθυγμα καὶ δυσθέατον ἐνιδεῖν μάλα μόλις τεκμαιρομένῳ δίδωσιν· ἐν δὲ τοῖς πεζοῖς καὶ γη-
C γενέσι λαμπρὰ καὶ ἐναργῆ καὶ βέβαια παραδείγματα τῶν εἰρημένων ἑκάστου λαμβάνειν ἔστι καὶ θεᾶσθαι.

[1] μὲν Reiske: μόνον.
[2] κολίαν Andrews: κάραβον.
[3] αὐτὸν follows ἐστιν in the mss.: transferred here by van Herwerden.
[4] αἰσχρὰν Reiske: αἰσχρόν.
[5] τὸ Reiske: τό τε.

[a] For Apollo's connexion with wolves see Aelian, *De Natura Animal.* x. 26; *al.*
[b] On Artemis, "The Lady of Wild Beasts" (*Iliad*, xxi. 470), see *Mnemosyne*, 4th series, iv (1951), pp. 230 ff.

glorious about fishing. No, and there's not a god, my friend, who has allowed himself to be called "conger-killer," as Apollo is "wolf-slayer,"[a] or "surmullet-slayer," as Artemis[b] is "deer-slaying."[c] And what is surprising in this when it's a more glorious thing for a man to have caught a boar or a stag or, so help me, a gazelle or a hare than to have bought one? As for your tunny[d] and your mackerel and your bonito! They're more honourable to buy than to catch oneself. For their lack of spirit or of any kind of resource or cunning has made the sport dishonourable, unfashionable, and illiberal.

10. In general, then, the evidence by which the philosophers demonstrate that beasts have their share of reason is their possession of purpose[e] and preparation and memory and emotions and care for their young[f] and gratitude for benefits and hostility to what has hurt them; to which may be added their ability to find what they need and their manifestations of good qualities, such as courage[g] and sociability and continence and magnanimity. Let us ask ourselves if marine creatures exhibit any of these traits, or perhaps some suggestion of them, that is extremely faint and difficult to discern (the observer only coming at long last to the opinion that it may be descried); whereas in the case of terrestrial and earth-born animals it is easy to find remarkably plain and unanswerable proofs of every one of the points I have mentioned.

[c] This accusation is answered in 983 E-F *infra*.
[d] See 980 A *infra*.
[e] *Cf.* 961 C *supra*.
[f] See the essay *De Amore Prolis*, *Mor.* 493 A ff. *passim*.
[g] Plato, at least, held that, philosophically speaking, no beast is brave: *Laches*, 196 D; *Republic*, 430 B.

(966) Πρῶτον οὖν ὅρα προθέσεις καὶ παρασκευὰς ταύρων ἐπὶ μάχῃ κονιομένων καὶ κάπρων θηγόντων ὀδόντας· ἐλέφαντες δέ, τῆς ὕλης ἣν ὀρύττοντες ἢ κείροντες ἐσθίουσιν ἀμβλὺν τὸν ὀδόντα ποιούσης ἀποτριβόμενον, τῷ ἑτέρῳ πρὸς ταῦτα χρῶνται, τὸν δ' ἕτερον ἔπακμον ἀεὶ καὶ ὀξὺν ἐπὶ τὰς ἀμύνας φυλάττουσιν. ὁ δὲ λέων ἀεὶ βαδίζει συνεστραμμένοις τοῖς ποσίν,[1] ἐντὸς ἀποκρύπτων τοὺς ὄνυχας, ἵνα μὴ τριβόμενοι τὴν ἀκμὴν ἀπαμβλύνωσι μηδὲ
D καταλείπωσιν εὐπορείαν τοῖς στιβεύουσιν· οὐ γὰρ ῥᾳδίως ὄνυχος εὑρίσκεται λεοντείου σημεῖον, ἀλλὰ μικροῖς[2] καὶ τυφλοῖς ἴχνεσιν ἐντυγχάνοντες ἀποπλανῶνται καὶ διαμαρτάνουσιν. ὁ δ' ἰχνεύμων ἀκηκόατε δήπουθεν ὡς οὐθὲν ἀπολείπει θωρακιζομένου πρὸς μάχην ὁπλίτου· τοσοῦτον ἰλύος περιβάλλεται καὶ περιπήγνυσι τῷ σώματι χιτῶνα μέλλων ἐπιτίθεσθαι τῷ κροκοδείλῳ. τὰς δὲ χελιδόνων πρὸ τῆς τεκνοποιίας παρασκευὰς ὁρῶμεν, ὡς εὖ τὰ στερεὰ κάρφη προϋποβάλλονται δίκην θεμελίων, εἶτα περιπλάττουσι τὰ κουφότερα· κἂν πηλοῦ τινος ἐχεκόλλου δεομένην αἴσθωνται τὴν νεοττιάν, λίμνης ἢ θαλάττης ἐν χρῷ παραπετόμεναι
E ψαύουσι τοῖς πτίλοις ἐπιπολῆς, ὅσον νοτεραί,[3] μὴ

[1] συνεστραμμένους [τοῖς ποσίν] W. C. H. from *Mor.* 520 F.
[2] μικροῖς] ἀμαυροῖς Kronenberg; *cf.* Xen. *Cyneg.* vi. 21.
[3] νοτερά, μὴ βαρέα Reiske.

[a] See Mair on Oppian, *Cyn.* ii. 57.
[b] Aelian, *De Natura Animal.* vi. 1; Philo, 51 (p. 125); Homer, *Iliad*, xiii. 474 f.
[c] *Cf.* Pliny, *Nat. Hist.* viii. 8; viii. 71 of the rhinoceros;

In the first place, then, behold the purposeful demonstrations and preparations of bulls [a] stirring up dust when intent on battle, and wild boars whetting their tusks.[b] Since elephants' tusks are blunted by wear when, by digging or chopping, they fell the trees that feed them, they use only one tusk for this purpose and keep the other always pointed and sharp for defence.[c] Lions [d] always walk with paws clenched and claws retracted so that these may not be dulled by wear at the point or leave a plain trail for trackers ; for it is not easy to find any trace of a lion's claw ; on the contrary, any sign of a track that is found is so slight and obscure that hunters lose the trail and go astray. You have heard, I am sure, how the ichneumon [e] girds itself for battle as thoroughly as any soldier putting on his armour, such a quantity of mud does it don and plaster about its body when it plans to attack the crocodile. Moreover, we see house-martins [f] preparing for procreation : how well they lay the solid twigs at the bottom to serve as a foundation, then mould the lighter bits about them ; and if they perceive that the nest needs a lump of mud to glue it together, they skim over a pond or lake, touching the water with only the tips of their feathers to make them moist, yet not heavy with

Aelian, *De Natura Animal.* vi. 56 ; Antigonus, *Hist. Mirab.* 102.

[d] *Cf. Mor.* 520 F ; Aelian, *De Natura Animal.* ix. 30.

[e] See Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 16 ff.), where, however, the animal's opponent is the asp. (So also Aelian, *De Natura Animal.* iii. 22 ; v. 48 ; vi. 38.) But *cf.* 980 E *infra* ; Aelian, *De Natura Animal.* viii. 25 ; x. 47 ; Nicander, *Theriaca*, 201.

[f] *Cf.* Thompson on Aristotle, *Historia Animal.* ix. 7 (612 b 21 ff.) ; Pliny, *Nat. Hist.* x. 92 ; Philo, 22 (p. 110) ; *Yale Class. Studies*, xii. 139, on *Anth. Pal.* x. 4. 6.

(966) βαρεῖαι γενέσθαι τῇ ὑγρότητι, συλλαβοῦσαι δὲ κονιορτὸν οὕτως ἐξαλείφουσι[1] καὶ συνδέουσι τὰ χαλῶντα καὶ διολισθάνοντα· τῷ δὲ σχήματι τοὔργον οὐ γωνιῶδες οὐδὲ πολύπλευρον, ἀλλ' ὁμαλὸν ὡς ἔνεστι μάλιστα καὶ σφαιροειδὲς ἀποτελοῦσι· καὶ γὰρ μόνιμον καὶ χωρητικὸν τὸ τοιοῦτο καὶ τοῖς ἐπιβουλεύουσι θηρίοις ἔξωθεν ἀντιλήψεις οὐ πάνυ δίδωσι.

Τὰ δ' ἀράχνης ἔργα, κοινὸν ἱστῶν γυναιξὶ καὶ θήρας σαγηνευταῖς ἀρχέτυπον, οὐ καθ' ἓν ἄν τις θαυμάσειε· καὶ γὰρ ἡ τοῦ νήματος ἀκρίβεια καὶ τῆς
F ὑφῆς τὸ μὴ διεχὲς μηδὲ στημονῶδες ἀλλὰ λείου συνέχειαν ὑμένος καὶ κόλλησιν ὑπό τινος ἀδήλως παραμεμιγμένης γλισχρότητος ἀπειργασμένον, ἥ τε βαφὴ τῆς χρόας ἐνάερον καὶ ἀχλυώδη ποιοῦσα τὴν ἐπιφάνειαν ὑπὲρ τοῦ λαθεῖν, αὐτή τε μάλιστα πάντων ἡ τῆς μηχανῆς αὐτῆς ἡνιοχεία καὶ κυβέρνησις, ὅταν ἐνσχεθῇ τι τῶν ἁλωσίμων, ὥσπερ δεινοῦ σαγηνευτοῦ, ταχὺ συναιρεῖν εἰς ταὐτὸ[2] καὶ συνάγειν
967 τὸ θήρατρον αἰσθανομένης καὶ φρονούσης, τῇ καθ' ἡμέραν ὄψει καὶ θέᾳ τοῦ γινομένου πιστὸν ἔσχε τὸν λόγον. ἄλλως δ' ἂν ἐδόκει μῦθος, ὥσπερ ἡμῖν ἐδόκει τὸ τῶν ἐν Λιβύῃ κοράκων, οἳ ποτοῦ δεόμενοι λίθους ἐμβάλλουσιν ἀναπληροῦντες καὶ ἀνάγοντες τὸ ὕδωρ, μέχρι ἂν ἐν ἐφικτῷ γένηται· εἶτα μέντοι

[1] ἐπαλείφουσι van Herwerden and some mss.
[2] ταὐτὸ Reiske: ταὐτὰ or ταῦτα.

[a] θηρία may be "serpents" here, or any wild beast, perhaps, such as members of the cat family that relish a diet of birds.

[b] For a collection of the *loci communes* dealing with swallow, bee, ant, spider, etc., see Dickermann in *Trans. Am. Philol. Assoc.* xlii (1911), pp. 123 ff.

dampness; then they scoop up dust and so smear over and bind together any parts that begin to sag or loosen. As for the shape of their work, it has no angles nor many sides, but is as smooth and circular as they can make it; such a shape is, in fact, both stable and capacious and provides no hold on the outside for scheming animals.[a]

There is more than one reason [b] for admiring spiders' [c] webs, the common model for both women's looms and fowlers' [d] nets; for there is the fineness of the thread and the evenness of the weaving, which has no disconnected threads and nothing like a warp, but is wrought with the even continuity of a thin membrane and a tenacity that comes from a viscous substance inconspicuously worked in. Then too, there is the blending of the colours that gives it an airy, misty look, the better to let it go undetected; and most notable of all is the art itself, like a charioteer's or a helmsman's, with which the spinner handles her artifice. When a possible victim is entangled, she perceives it, and uses her wits, like a skilled handler of nets, to close the trap suddenly and make it tight. Since this is daily under our eyes and observation, my account is confirmed. Otherwise it would seem a mere fiction, as I formerly regarded the tale of the Libyan crows [e] which, when they are thirsty, throw stones into a pot to fill it and raise the water until it is within their reach; but later when I saw a dog

[c] Aristotle, *Historia Animal.* ix. 39 (623 a 7 ff.); Aelian, *De Natura Animal.* i. 21; Pliny, *Nat. Hist.* xi. 79-84; Philo, 17 (p. 107); Philostratus, *Imagines*, ii. 28.

[d] Commonly taken as "fishermen," but this seems unlikely here.

[e] *Cf. Anth. Pal.* ix. 272: Aelian, *De Natura Animal.* ii. 48; Pliny, *Nat. Hist.* x. 125; Avianus, fable 27.

(967) κύνα θεασάμενος ἐν πλοίῳ, τῶν ναυτῶν μὴ παρόντων, εἰς ἔλαιον ἀμφορέως ἀποδεοῦς ἐμβάλλοντα τῶν χαλίκων, ἐθαύμασα πῶς νοεῖ καὶ συνίησι τὴν γινομένην ἔκθλιψιν ὑπὸ τῶν βαρυτέρων τοῖς κουφοτέροις ὑφισταμένων.

Ὅμοια δὲ καὶ τὰ τῶν Κρητικῶν μελισσῶν καὶ
B τὰ τῶν ἐν Κιλικίᾳ χηνῶν· ἐκεῖναι μὲν γὰρ ἀνεμῶδές τι μέλλουσαι κάμπτειν ἀκρωτήριον ἑρματίζουσιν ἑαυτάς, ὑπὲρ τοῦ μὴ παραφέρεσθαι, μικροῖς λιθιδίοις· οἱ δὲ χῆνες τοὺς ἀετοὺς δεδοικότες, ὅταν ὑπερβάλλωσι τὸν Ταῦρον, εἰς τὸ στόμα λίθον εὐμεγέθη λαμβάνουσιν, οἷον ἐπιστομίζοντες αὑτῶν καὶ χαλινοῦντες τὸ φιλόφωνον καὶ λάλον, ὅπως λάθωσι σιωπῇ παρελθόντες. τῶν δὲ γεράνων καὶ τὸ περὶ τὴν πτῆσιν εὐδοκιμεῖ· πέτονται γάρ, ὅταν ᾖ πνεῦμα πολὺ καὶ τραχὺς ἀήρ, οὐχ, ὥσπερ εὐδίας οὔσης, μετωπηδὸν ἢ κόλπῳ μηνοειδοῦς περιφερείας, ἀλλ' εὐθὺς εἰς τρίγωνον συνάγουσαι σχί-
C ζουσι τῇ κορυφῇ τὸ πνεῦμα περιρρέον, ὥστε μὴ διασπᾶσθαι τὴν τάξιν. ὅταν δὲ κατάρωσιν ἐπὶ γῆν, αἱ προφυλακὴν ἔχουσαι νυκτὸς ἐπὶ θατέρου σκέλους ὀχοῦνται τὸ σῶμα, τῷ δ' ἑτέρῳ ποδὶ λίθον περιλαβοῦσαι κρατοῦσι· συνέχει[1] γὰρ ὁ τῆς ἁφῆς τόνος ἐν τῷ μὴ καθεύδειν πολὺν χρόνον· ὅταν δ' ἀνῶσιν, ἐκπεσὼν ὁ λίθος ταχὺ διήγειρε τὴν προεμένην· ὥστε μὴ πάνυ θαυμάζειν τοῦ Ἡρακλέους,

[1] συνέχει Leonicus: συνεχής.

[a] *Cf. Mor.* 510 A-B, which adds the detail that the geese's

on board ship, since the sailors were away, putting pebbles into a half empty jar of oil, I was amazed at its knowing that lighter substances are forced upward when the heavier settle to the bottom.

Similar tales are told of Cretan bees and of geese in Cilicia.[a] When the bees are going to round some windy promontory, they ballast themselves with little stones[b] so as not to be carried out to sea; while the geese, in fear of eagles, take a large stone in their beaks whenever they cross Mt. Taurus, as it were reining in and bridling their gaggling loquacity that they may pass over in silence unobserved. It is well known, too, how cranes[c] behave when they fly. Whenever there is a high wind and rough weather they do not fly, as on fine days, in line abreast or in a crescent-shaped curve; but they form at once a compact triangle with the point cleaving the gale that streams past, so that there is no break in the formation. When they have descended to the ground, the sentinels that stand watch at night support themselves on one foot and with the other grasp a stone and hold it firmly[d]; the tension of grasping this keeps them awake for a long time; but when they do relax, the stone escapes and quickly rouses the culprit.[e] So that I am not at all surprised that

flight is by night. Contrast Aelian, *De Natura Animal.* ii. 1, Pliny, *Nat. Hist.* x. 60, of cranes.

[b] Aelian, *De Natura Animal.* v. 13; Pliny, *Nat. Hist.* xi. 24, and Ernout, *ad loc.*; Dio Chrysostom, xliv. 7. *Cf.* 979 B *infra*, of the sea hedgehog; Pliny, *Nat. Hist.* x. 69.

[c] *Cf.* 979 B *infra*; Aelian, *De Natura Animal.* iii. 13; Pliny, *Nat. Hist.* x. 63, of geese; Mair on Oppian, *Hal.* i. 624; Lucan, v. 713 ff.

[d] *Cf.* 979 D *infra*; Aelian, *loc. cit.*; Pliny, *Nat. Hist.* x. 59.

[e] *Cf.* the anecdote of Alexander in Ammianus Marcellinus, xvi. 5. 4; of Aristotle in Diogenes Laertius, v. 16.

(967) εἰ τόξα μασχάλῃ ὑποθεὶς καὶ

κραταιῷ περιβαλὼν βραχίονι,
εὕδει πιέζων χειρὶ δεξιᾷ ξύλον·

μηδ' αὖ πάλιν τοῦ πρῶτον[1] ὑπονοήσαντος ὀστρέου μεμυκότος ἀνάπτυξιν ἐντυχόντα τοῖς ἐρωδιῶν σοφίσμασιν· ὅταν γὰρ τὴν κόγχην καταπίῃ μεμυκυῖαν, D ἐνοχλούμενος ἐγκαρτερεῖ, μέχρι ἂν αἴσθηται μαλασσομένην καὶ χαλῶσαν ὑπὸ τῆς θερμότητος· τότε δ' ἐκβαλὼν κεχηνυῖαν καὶ ἀνεσπασμένην ἐξεῖλε τὸ ἐδώδιμον.

11. Τὰς δὲ μυρμήκων οἰκονομίας καὶ παρασκευὰς ἐκφράσαι μὲν ἀκριβῶς ἀμήχανον, ὑπερβῆναι δὲ παντελῶς ὀλίγωρον· οὐδὲν γὰρ οὕτω μικρὸν ἡ φύσις ἔχει μειζόνων καὶ καλλιόνων κάτοπτρον, ἀλλ' ὥσπερ ἐν σταγόνι καθαρᾷ πάσης ἔνεστιν ἀρετῆς ἔμφασις, " ἔνθ' ἔνι μὲν φιλότης " τὸ κοινωνικόν, ἔνι δ' ἀνδρείας εἰκὼν τὸ φιλόπονον· ἔνεστι δὲ πολλὰ μὲν ἐγκρατείας σπέρματα, πολλὰ δὲ φρονή- E σεως καὶ δικαιοσύνης. ὁ μὲν οὖν Κλεάνθης ἔλεγε, καίπερ οὐ φάσκων μετέχειν λόγου τὰ ζῷα, τοιαύτῃ θεωρίᾳ παρατυχεῖν· μύρμηκας ἐλθεῖν ἐπὶ μυρμηκιὰν ἑτέραν μύρμηκα νεκρὸν φέροντας· ἀνιόντας οὖν ἐκ τῆς μυρμηκιᾶς ἐνίους οἷον ἐντυγχάνειν αὐτοῖς καὶ πάλιν κατέρχεσθαι· καὶ τοῦτο δὶς ἢ τρὶς

[1] πρῶτον Benseler : πρώτου.

[a] Nauck, *Trag. Graec. Frag.* p. 919, Adespoton 416.
[b] That is, by dropping it in hot water.
[c] *Cf.* Aelian, *De Natura Animal.* iii. 20 ; another procedure is described in v. 35. See also Pliny, *Nat. Hist.* x. 115, of the shoveller duck : Philo, 31 (p. 116) ; Antigonus, *Hist. Mirab.* 41 ; *al.*
[d] Homer, *Iliad*, xiv. 216.

Heracles tucked his bow under his arm :

> Embracing it with mighty arm he sleeps,
> Keeping his right hand gripped about the club.[a]

Nor, again, am I surprised at the man who first guessed how to open an oyster [b] when I read of the ingenuity of herons. For they swallow a closed mussel and endure the discomfort until they know that it has been softened and relaxed by their internal heat ; then they disgorge it wide open and unfolded and extract the meat.[c]

11. It is impossible to relate in full detail all the methods of production and storage practised by ants, but it would be careless to omit them entirely. Nature has, in fact, nowhere else so small a mirror of greater and nobler enterprises. Just as you may see greater things reflected in a drop of clear water, so among ants there exists the delineation of every virtue.

> Love and affection are found,[d]

namely their social life. You may see, too, the reflection of courage in their persistence in hard labour.[e] There are many seeds of temperance and many of prudence and justice. Now Cleanthes,[f] even though he declared that animals are not endowed with reason, says that he witnessed the following spectacle : some ants came to a strange anthill carrying a dead ant. Other ants then emerged from the hill and seemed, as it were, to hold converse with the first party and then went back again. This happened

[e] *Cf.* Plato, *Laches*, 192 B ff. : we have here the four Platonic virtues, with Love added.

[f] Von Arnim, *S.V.F.* i, p. 116, frag. 515 : *cf.* Aelian, *De Natura Animal.* vi. 50.

(967) γενέσθαι· τέλος δὲ τοὺς μὲν κάτωθεν ἀνενεγκεῖν ὥσπερ λύτρα τοῦ νεκροῦ σκώληκα, τοὺς δ' ἐκεῖνον
F ἀραμένους ἀποδόντας δὲ τὸν νεκρὸν οἴχεσθαι.

Τῶν δὲ πᾶσιν ἐμφανῶν ἥ τε περὶ τὰς ἀπαντήσεις ἐστὶν εὐγνωμοσύνη, τῶν μηδὲν φερόντων τοῖς φέρουσιν ἐξισταμένων ὁδοῦ καὶ παρελθεῖν διδόντων· αἵ τε τῶν δυσφόρων καὶ δυσπαρακομίστων διαβρώσεις καὶ διαιρέσεις, ὅπως εὐβάστακτα πλείοσι γένηται. τὰς δὲ τῶν σπερμάτων[1] διαθέσεις καὶ διαψύξεις ἐκτὸς ὑετοῦ ποιεῖται σημεῖον ὁ Ἄρατος·

> ἢ κοίλης μύρμηκες ὀχῆς ἐξ ὤεα πάντα
> θᾶσσον ἀνηνέγκαντο·

καί τινες οὐκ "ᾠὰ" γράφουσιν, ἀλλ' "ἤια"[2] ὡς[3] τοὺς ἀποκειμένους καρπούς, ὅταν εὐρῶτα συνά-
968 γοντας αἴσθωνται καὶ φοβηθῶσι φθορὰν καὶ σῆψιν, ἀναφερόντων. ὑπερβάλλει δὲ πᾶσαν ἐπίνοιαν συνέσεως ἡ τοῦ πυροῦ τῆς βλαστήσεως προκατάληψις· οὐ γὰρ δὴ παραμένει ξηρὸς οὐδ' ἄσηπτος ἀλλὰ διαχεῖται καὶ γαλακτοῦται μεταβάλλων εἰς τὸ φύειν· ἵν' οὖν μὴ γενόμενος σπέρμα τὴν σιτίου χρείαν διαφθείρῃ, παραμένῃ δ' αὐτοῖς ἐδώδιμος, ἐξεσθίουσι τὴν ἀρχήν, ἀφ' ἧς τὸν βλαστὸν ὁ πυρὸς ἀφίησιν.

[1] σπερμάτων] mss. have also κυμάτων and κερμάτων (κυημάτων Bernardakis).
[2] ἤια Leopardi : ἐὰ.
[3] ὡς added by Wyttenbach.

[a] *Cf.* Aelian, *De Natura Animal.* ii. 25.
[b] *Phaenomena*, 956 : *cf.* Vergil, *Georgics*, i. 379 f. ; Theophrastus, *De Signis*, 22.
[c] Not *oia*, but *eia* : "What the ants really carry out in

two or three times until at last they brought up a grub to serve as the dead ant's ransom, whereupon the first party picked up the grub, handed over the corpse, and departed.

A matter obvious to everyone is the consideration ants show when they meet: those that bear no load always give way to those who have one and let them pass.[a] Obvious also is the manner in which they gnaw through and dismember things that are difficult to carry or to convey past an obstacle, in order that they may make easy loads for several. And Aratus [b] takes it to be a sign of rainy weather when they spread out their eggs and cool them in the open:

> When from their hollow nest the ants in haste
> Bring up their eggs;

and some do not write "eggs" here, but "provisions," [c] in the sense of stored grain which, when they notice that it is growing mildewed and fear that it may decay and spoil, they bring up to the surface. But what goes beyond any other conception of their intelligence is their anticipation of the germination of wheat. You know, of course, that wheat does not remain permanently dry and stable, but expands and lactifies in the process of germination. In order, then, to keep it from running to seed and losing its value as food, and to keep it permanently edible, the ants eat out the germ from which springs the new shoot of wheat.[d]

Aratus and Vergil is their pupas, but these are commonly called 'eggs' to this day" (Platt, *Class. Quart.* v, p. 255). The two readings in this passage seem to show that Plutarch had at hand an edition with a commentary; *cf.* also 976 F *infra*, on the interpretation of Archilochus, and *Mor.* 22 B.

[d] *Cf.* Pliny, *Nat. Hist.* xi. 109, and Ernout *ad loc.*

(968) Τοὺς δὲ τὰς μυρμηκιὰς αὐτῶν ἐπὶ τῷ καταμαθεῖν ὥσπερ ἐξ ἀνατομῆς παρατηροῦντας[1] οὐκ ἀποδέχομαι· λέγουσι δ' οὖν οὐκ εὐθεῖαν εἶναι τὴν ἀπὸ τῆς
B ὀπῆς[2] κάθοδον οὐδ' εὔπορον ἄλλῳ θηρίῳ διεξελθεῖν, ἀλλὰ καμπαῖς καὶ στρεβλότησι κεκλασμένας ὑποπορεύσεις καὶ ἀνατρήσεις ἐχούσαις εἰς τρεῖς κοιλότητας ἀποτελευτῶσαν, ὧν τὴν μὲν ἐνδιαίτημα κοινὸν αὐτοῖς εἶναι, τὴν δὲ τῶν ἐδωδίμων ταμεῖον, εἰς δὲ τὴν τρίτην ἀποτίθεσθαι τοὺς θνῄσκοντας.

12. Οἶμαι δὲ μὴ ἄκαιρος ὑμῖν φανεῖσθαι τοῖς μύρμηξιν ἐπεισάγων τοὺς ἐλέφαντας, ἵνα τοῦ νοῦ τὴν φύσιν ἔν τε τοῖς μικροτάτοις ἅμα καὶ μεγίστοις σώμασι κατανοήσωμεν, μήτε τούτοις ἐναφανιζομένην μήτ' ἐκείνοις ἐνδέουσαν. οἱ μὲν οὖν ἄλλοι θαυμάζουσι τοῦ ἐλέφαντος ὅσα μανθάνων καὶ διδα-
C σκόμενος ἐν θεάτροις ἐπιδείκνυται σχημάτων εἴδη καὶ μεταβολάς, ὧν οὐδ' ἀνθρωπίναις μελέταις τὸ ποικίλον καὶ περιττὸν ἐν μνήμῃ καὶ καθέξει[3] γενέσθαι πάνυ ῥᾴδιόν ἐστιν· ἐγὼ δὲ μᾶλλον ἐν τοῖς ἀφ' αὑτοῦ καὶ ἀδιδάκτοις τοῦ θηρίου πάθεσι καὶ κινήμασιν, ὥσπερ ἀκράτοις καὶ ἀπαραχύτοις, ἐμφαινομένην ὁρῶ τὴν σύνεσιν.

Ἐν Ῥώμῃ μὲν γὰρ οὐ πάλαι πολλῶν προδιδα-

[1] παρατηροῦντας Post: πληροῦντας.
[2] ὀπῆς Meziriacus: ὅλης.
[3] καὶ καθέξει] καθεξῆς van Herwerden.

[a] The intricate galleries of anthills were used for purposes of literary comparisons by the ancients: see the fragment of Pherecrates in *Mor.* 1142 A and Aristophanes, *Thesmophoriazusae*, 100 (on Timotheüs and Agathon respectively).

[b] Aelian, *De Natura Animal.* vi. 43 divides into men's apartments, women's apartments, and storerooms; see also

I do not approve of those who, to make a complete study of anthills, inspect them, as it were, anatomically. But, be that as it may, they report that the passage leading downward from the opening is not at all straight or easy for any other creature to traverse; it passes through turns and twists [a] with branching tunnels and connecting galleries and terminates in three hollow cavities. One of these is their common dwelling-place, another serves as storeroom for provisions, while in the third they deposit the dying.[b]

12. I don't suppose that you will think it out of order if I introduce elephants directly on top of ants in order that we may concurrently scrutinize the nature of understanding in both the smallest and the largest of creatures, for it is neither suppressed in the latter nor deficient in the former. Let others, then, be astonished that elephants learn, or are taught, to exhibit in the theatre all the many postures and variations of movement that they do,[c] these being so varied and so complicated to memorize and retain that they are not at all easy even for human artists. For my part, I find the beast's understanding better manifested in his own spontaneous and uninstructed feelings and movements, in a pure, as it were, and undiluted state.

Well, not very long ago at Rome,[d] where a large

Philo, 42 (p. 120), and Boulenger, *Animal Mysteries*, pp. 128 ff. for a modern account. On the social life of ants (and animals) as contrasted with that of humans see Dio Chrysostom, xl. 32, 40 f.; xlviii. 16.

[c] *Cf. Mor.* 98 E.

[d] *Cf.* Pliny, *Nat. Hist.* viii. 6, which shows that Plutarch is drawing on literature, not personal observation; *cf.* also Aelian, *De Natura Animal.* ii. 11, for the elaborateness of the manœuvres; Philostratus, *Vita Apoll.* ii. 13; Philo, 54 (p. 126); see also 992 B *infra*.

(968) σκομένων στάσεις τινὰς ἵστασθαι[1] παραβόλους καὶ κινήσεις δυσεξελίκτους ἀνακυκλεῖν, εἷς ὁ δυσμαθέστατος ἀκούων κακῶς ἑκάστοτε καὶ κολαζόμενος πολλάκις ὤφθη νυκτὸς αὐτὸς ἀφ' ἑαυτοῦ πρὸς τὴν
D σελήνην ἀναταττόμενος τὰ μαθήματα καὶ μελετῶν.

Ἐν δὲ Συρίᾳ πρότερον Ἅγνων ἱστορεῖ, τρεφομένου κατ' οἰκίαν ἐλέφαντος, τὸν ἐπιστάτην λαμβάνοντα κριθῶν μέτρον ὑφαιρεῖν καὶ χρεωκοπεῖν μέρος ἥμισυ καθ' ἡμέραν· ἐπεὶ δέ, τοῦ δεσπότου παρόντος ποτὲ καὶ θεωμένου, πᾶν τὸ μέτρον κατήρασεν, ἐμβλέψαντα καὶ διαγαγόντα τὴν προβοσκίδα τῶν κριθῶν ἀποδιαστῆσαι καὶ διαχωρίσαι τὸ μέρος, ὡς ἐνῆν λογιώτατα κατειπόντα τοῦ ἐπιστάτου τὴν ἀδικίαν· ἄλλον δέ, ταῖς κριθαῖς λίθους καὶ γῆν εἰς τὸ μέτρον τοῦ ἐπιστάτου καταμιγνύοντος, ἑψομένων κρεῶν, δραξάμενον τῆς τέφρας ἐμβαλεῖν εἰς
E τὴν χύτραν. ὁ δ' ὑπὸ τῶν παιδαρίων προπηλακισθεὶς ἐν Ῥώμῃ τοῖς γραφείοις τὴν προβοσκίδα κεντούντων ὃν συνέλαβε μετέωρον ἐξάρας ἐπίδοξος ἦν ἀποτυμπανιεῖν[2]· κραυγῆς δὲ τῶν παρόντων γενομένης, ἀτρέμα πρὸς τὴν γῆν πάλιν ἀπηρείσατο καὶ παρῆλθεν, ἀρκοῦσαν ἡγούμενος δίκην τῷ τηλικούτῳ φοβηθῆναι.

Περὶ δὲ τῶν ἀγρίων καὶ αὐτονόμων ἄλλα τε θαυμάσια καὶ τὰ περὶ τὰς διαβάσεις τῶν ποταμῶν ἱστοροῦσι· προδιαβαίνει γὰρ ἐπιδοὺς αὑτὸν ὁ νεώ-

[1] ἵστασθαι Casaubon: κτᾶσθαι.
[2] ἀποτυμπανιεῖν W. C. H. from *Mor.* 170 A: ἀποτυμπανίσειν.

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[a] Of Tarsus, pupil of Carneades.
[b] *Cf.* Aelian, *De Natura Animal.* vi. 52.

number of elephants were being trained to assume dangerous stances and wheel about in complicated patterns, one of them, who was the slowest to learn and was always being scolded and often punished, was seen at night, alone by himself in the moonlight, voluntarily rehearsing his lessons and practising them.

Formerly in Syria, Hagnon [a] tells us, an elephant was brought up in its master's house and every day the keeper, when he received a measure of barley, would filch away and appropriate half of it ; but on one occasion, when the master was present and watching, the keeper poured out the whole measure. The elephant gave a look, raised its trunk, and made two piles of the barley, setting aside half of it and thus revealing as eloquently as could be the dishonesty of its keeper. And another elephant, whose keeper used to mix stones and dirt in its barley ration, when the keeper's meat was cooking, scooped up some ashes and threw them into the pot.[b] And another in Rome, being tormented by little boys who pricked its proboscis with their writing styluses, grabbed one of them and raised him into the air as if to dash him to death : but when the spectators cried out, it gently set the child down on the ground again and passed along, thinking it sufficient punishment for one so young to have been frightened.

Concerning wild elephants who are self-governing they tell many wonderful tales, particularly the one about the fording of rivers [c] : the youngest and smallest volunteers his services to go first into the

[c] Pliny, *Nat. Hist.* viii. 11, gives a different account ; still different is Aelian, *De Natura Animal.* vii. 15, and *cf.* Philostratus, *Vita Apoll.* ii. 15.

(968) τατος καὶ μικρότατος· οἱ δ' ἑστῶτες ἀποθεωροῦσιν ὡς, ἂν ἐκεῖνος ὑπεραίρῃ τῷ μεγέθει τὸ ῥεῦμα, πολλὴν τοῖς μείζοσι πρὸς τὸ θαρρεῖν περιουσίαν τῆς
F ἀσφαλείας οὖσαν.

13. Ἐνταῦθα τοῦ λόγου γεγονὼς οὐ δοκῶ μοι παρήσειν δι' ὁμοιότητα τὸ τῆς ἀλώπεκος. οἱ μὲν οὖν μυθολόγοι τῷ Δευκαλίωνί φασι περιστερὰν ἐκ τῆς λάρνακος ἀφιεμένην δήλωμα γενέσθαι χειμῶνος μὲν εἴσω πάλιν ἐνδυομένην, εὐδίας δ' ἀποπτᾶσαν· οἱ δὲ Θρᾷκες ἔτι νῦν, ὅταν παγέντα διαβαίνειν ποταμὸν ἐπιχειρῶσιν, ἀλώπεκα ποιοῦνται γνώμονα
969 τῆς τοῦ πάγου στερρότητος· ἡσυχῇ γὰρ ὑπάγουσα παραβάλλει τὸ οὖς· κἂν μὲν αἴσθηται ψόφῳ τοῦ ῥεύματος ἐγγὺς ὑποφερομένου, τεκμαιρομένη μὴ γεγονέναι διὰ βάθους τὴν πῆξιν ἀλλὰ λεπτὴν καὶ ἀβέβαιον ἵσταται, κἂν ἐᾷ τις, ἐπανέρχεται· τῷ δὲ μὴ ψοφεῖν θαρροῦσα διῆλθε. καὶ τοῦτο μὴ λέγωμεν αἰσθήσεως ἄλογον ἀκρίβειαν, ἀλλ' ἐξ αἰσθήσεως συλλογισμὸν ὅτι "τὸ ψοφοῦν κινεῖται, τὸ δὲ κινούμενον οὐ πέπηγε, τὸ δὲ μὴ πεπηγὸς ὑγρόν ἐστι, τὸ δ' ὑγρὸν ἐνδίδωσιν." οἱ δὲ διαλεκτικοί φασι τὸν κύνα τῷ διὰ πλειόνων διεζευγμένῳ χρώμενον ἐν
B ταῖς πολυσχιδέσιν ἀτραποῖς συλλογίζεσθαι πρὸς ἑαυτόν, "ἤτοι τήνδε τὸ θηρίον ὥρμηκεν ἢ τήνδε ἢ

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[a] The authorities on Deucalion's Flood are assembled by Frazer on Apollodorus, i. 7. 2 (L.C.L.), and more completely in his *Folk-Lore in the Old Testament*, i, pp. 146 ff. Plutarch is the only Greek author to add the Semitic dove story, though Lucian (*De Dea Syria*, 12 ff.) was to add to the other major contaminations.

[b] *Cf.* 949 D *supra* and the note.

stream. The others wait on the bank and observe the result, for if his back remains above water, those that are larger than he will have a wide margin of safety to give them confidence.

13. At this point in my discourse, I imagine that I shall do well not to omit the case of the fox, since it is so similar. Now the story-books [a] tell us that when Deucalion released a dove from the ark, as long as she returned, it was a certain sign that the storm was still raging; but as soon as she flew away, it was a harbinger of fair weather. So even to this day the Thracians,[b] whenever they propose crossing a frozen river, make use of a fox as an indicator of the solidity of the ice. The fox moves ahead slowly and lays her ear to the ice; if she perceives by the sound that the stream is running close underneath, judging that the frozen part has no great depth, but is only thin and insecure, she stands stock still and, if she is permitted, returns to the shore; but if she is reassured by the absence of noise, she crosses over. And let us not declare that this is a nicety of perception unaided by reason: it is, rather, a syllogistic conclusion developed from the evidence of perception: "What makes noise must be in motion; what is in motion is not frozen; what is not frozen is liquid; what is liquid gives way." So logicians [c] assert that a dog, at a point where many paths split off, makes use of a multiple disjunctive [d] argument and reasons with himself: "Either the wild beast has taken this

[c] Specifically Chrysippus (*cf.* von Arnim, *S.V.F.* ii, pp. 726 f.). *Cf.* Sextus Empiricus, *Outlines of Pyrrhonism*, i. 69 (the whole passage i. 62-72 is worth reading); Aelian, *De Natura Animal.* vi. 59; Philo, 45 (p. 122).

[d] For the form of the syllogism see Diogenes Laertius, vii. 81.

(969) τήνδε[1]· ἀλλὰ μὴν οὔτε τήνδε οὔτε τήνδε· τὴν λοιπὴν ἄρα"· τῆς μὲν αἰσθήσεως οὐδὲν ἢ τὴν πρόσληψιν διδούσης, τοῦ δὲ λόγου τὰ λήμματα καὶ τὸ συμπέρασμα τοῖς λήμμασιν ἐπιφέροντος. οὐ μὴν δεῖταί γε τοιαύτης μαρτυρίας ὁ κύων· ψευδὴς γάρ ἐστι καὶ κίβδηλος· ἡ γὰρ αἴσθησις αὐτὴ τοῖς ἴχνεσι καὶ τοῖς ῥεύμασι[2] τοῦ θηρίου τὴν φυγὴν ἐπιδείκνυσι, χαίρειν λέγουσα διεζευγμένοις ἀξιώμασι καὶ συμπεπλεγμένοις. δι' ἄλλων δὲ πολλῶν ἔργων καὶ παθῶν καὶ καθηκόντων οὔτ' ὀσφραντῶν οὔθ' ὁρα-
C τῶν ἀλλὰ διανοίᾳ καὶ λόγῳ μόνον πρακτῶν καὶ θεατῶν ὄντων κατιδεῖν ἔστι τὴν κυνὸς φύσιν· οὗ τὰς μὲν ἐν ἄγραις ἐγκρατείας καὶ πειθαρχίας καὶ ἀγχινοίας γελοῖος ἔσομαι λέγων πρὸς ὑμᾶς τοὺς ὁρῶντας αὐτὰ καθ' ἡμέραν καὶ μεταχειριζομένους.

Κάλβου δὲ[3] τοῦ Ῥωμαίου σφαγέντος ἐν τοῖς ἐμφυλίοις πολέμοις οὐδεὶς ἐδυνήθη τὴν κεφαλὴν ἀποτεμεῖν πρότερον πρὶν ἢ τὸν κύνα τὸν φυλάττοντα καὶ προμαχόμενον αὐτοῦ κατακεντῆσαι περιστάντας. Πύρρος δ' ὁ βασιλεὺς ὁδεύων ἐνέτυχε κυνὶ φρουροῦντι σῶμα πεφονευμένου, καὶ πυθόμενος τρίτην ἡμέραν ἐκείνην ἄσιτον παραμένειν καὶ μὴ
D ἀπολείπειν[4] τὸν μὲν νεκρὸν ἐκέλευσε θάψαι, τὸν δὲ κύνα μεθ' ἑαυτοῦ κομίζειν ἐπιμελομένους. ὀλίγαις

[1] ἢ τήνδε added by early editors.
[2] ῥεύμασι] πνεύμασι Emperius.
[3] Κάλβου δὲ Dübner : οὐδὲ.
[4] ἀπολείπειν Bernardakis : ἀπολιπεῖν.

[a] *Cf.* Shorey on Plato, *Republic*, 427 E (L.C.L., vol. I, p. 347, note *e*).

[b] For the philosophic dog see Plato, *op. cit.* 376 B: the scholia of Olympiodorus add that Socrates' famous oath "by

path, or this, or this. But surely it has not taken this, or this. Then it must have gone by the remaining road." Perception here affords nothing but the minor premiss, while the force of reason gives the major premisses and adds the conclusion to the premisses. A dog, however, does not need such a testimonial, which is both false and fraudulent ; for it is perception itself, by means of track and spoor,[a] which indicates the way the creature fled ; it does not bother with disjunctive and copulative propositions. The dog's true capacity may be discerned from many other acts and reactions and the performance of duties, which are neither to be smelled out nor seen by the eye, but can be carried out or perceived only by the use of intelligence and reason.[b] I should only make myself ridiculous if I described the dog's self-control and obedience and sagacity on hunting parties to you who see and handle these matters every day.

There was a Roman named Calvus [c] slain in the Civil Wars, but no one was able to cut off his head until they encircled and stabbed to death the dog who guarded his master and defended him. And King Pyrrhus [d] on a journey chanced upon a dog guarding the body of a murdered man ; in answer to his questions he was told that the dog had remained there without eating for three days and refused to leave. Pyrrhus gave orders for the corpse to be buried and the dog cared for and brought along

the dog " was symbolic of the creature's rational nature. See also Sinclair, *Class. Rev.* xlii (1948), p. 61 ; the parallel passages are collected by J. E. B. Mayor, *Class. Rev.* xii (1898), pp. 93 ff.

[c] See Aelian, *De Natura Animal.* vii. 10.

[d] *Cf.* Aelian, *loc. cit.* ; Pliny, *Nat. Hist.* viii. 142.

(969) δ' ὕστερον ἡμέραις ἐξέτασις ἦν τῶν στρατιωτῶν καὶ πάροδος καθημένου τοῦ βασιλέως καὶ παρῆν ὁ κύων ἡσυχίαν ἔχων· ἐπεὶ δὲ τοὺς φονέας τοῦ δεσπότου παριόντας εἶδεν ἐξέδραμε μετὰ φωνῆς καὶ θυμοῦ ἐπ' αὐτοὺς καὶ καθυλάκτει πολλάκις μεταστρεφόμενος εἰς τὸν Πύρρον, ὥστε μὴ μόνον ἐκείνῳ δι' ὑποψίας ἀλλὰ καὶ πᾶσι τοῖς παροῦσι τοὺς ἀνθρώπους γενέσθαι· διὸ συλληφθέντες εὐθὺς καὶ ἀνακρινόμενοι, μικρῶν τινων τεκμηρίων ἔξωθεν προσγενομένων, ὁμολογήσαντες τὸν φόνον ἐκολάσθησαν.

E Ταὐτὰ[1] δὲ καὶ τὸν Ἡσιόδου κύνα τοῦ σοφοῦ δρᾶσαι λέγουσι, τοὺς Γανύκτορος ἐξελέγξαντα τοῦ Ναυπακτίου παῖδας, ὑφ' ὧν ὁ Ἡσίοδος ἀπέθανεν. ὃ δ' οἱ πατέρες ἡμῶν ἔγνωσαν αὐτοὶ σχολάζοντες Ἀθήνησιν ἐναργέστερόν ἐστι τῶν εἰρημένων· παραρρυεὶς γὰρ ἄνθρωπος εἰς τὸν νεὼν τοῦ Ἀσκληπιοῦ τὰ εὔογκα τῶν ἀργυρῶν καὶ χρυσῶν ἔλαβεν ἀναθημάτων καὶ λεληθέναι νομίζων ὑπεξῆλθεν· ὁ δὲ φρουρὸς κύων, ὄνομα Κάππαρος, ἐπεὶ μηδεὶς ὑλακτοῦντι τῶν ζακόρων ὑπήκουσεν αὐτῷ, φεύγοντα τὸν ἱερόσυλον ἐπεδίωκε· καὶ πρῶτον μὲν βαλλόμε-
F νος λίθοις οὐκ ἀπέστη· γενομένης δ' ἡμέρας, ἐγγὺς οὐ προσιὼν ἀλλ' ἀπ' ὀφθαλμοῦ παραφυλάττων εἵπετο καὶ τροφὴν προβάλλοντος οὐκ ἐλάμβανεν· ἀναπαυομένῳ δὲ παρενυκτέρευε καὶ βαδίζοντος πάλιν ἀναστὰς ἐπηκολούθει, τοὺς δ' ἀπαντῶντας ὁδοιπό-

[1] ταὐτὰ Reiske : ταῦτα.

[a] *Cf.* 984 D *infra*. A different account, omitting the dog, will be found in *Mor.* 162 C-F (where see Wyttenbach's note);

in his train. A few days later there was an inspection of the soldiers, who marched in front of the king seated on his throne, while the dog lay quietly by his side. But when it saw its master's murderers filing past, it rushed at them with furious barking and, as it voiced its accusation, turned to look at the king so that not only he, but everyone present, became suspicious of the men. They were at once arrested and when put to the question, with the help of some bits of external evidence as well, they confessed the murder and were punished.

The same thing is said to have been done by the poet Hesiod's [a] dog, which convicted the sons of Ganyctor the Naupactian, by whom Hesiod had been murdered. But a matter which came to the attention of our fathers when they were studying at Athens is even plainer than anything so far mentioned. A certain fellow slipped into the temple of Asclepius,[b] took such gold and silver offerings as were not bulky, and made his escape, thinking that he had not been detected. But the watchdog, whose name was Capparus, when none of the sacristans responded to its barking, pursued the escaping temple-thief. First the man threw stones at it, but could not drive it away. When day dawned, the dog did not approach close, but followed the man, always keeping him in sight, and refused the food he offered. When he stopped to rest, the dog passed the night on guard; when he struck out again, the dog got up and kept following, fawning on the other people it met

cf. also Pollux, *Onomasticon*, v. 42 and Gabathüler on *Anth. Pal.* vii. 55 (*Hellenistische Epigramme auf Dichter*, p. 31).

[b] The same story in Aelian, *De Natura Animal.* vii. 13, indicates a literary source. See now E. R. Dodds, *The Greeks and the Irrational*, p. 114 and n. 65.

(969) ρους ἔσαινεν, ἐκείνῳ δ' ἐφυλάκτει καὶ προσέκειτο.
ταῦτα δ' οἱ διώκοντες πυνθανόμενοι παρὰ τῶν
ἀπαντώντων ἅμα καὶ τὸ χρῶμα φραζόντων καὶ τὸ
μέγεθος τοῦ κυνὸς προθυμότερον ἐχρήσαντο τῇ
διώξει, καὶ καταλαβόντες τὸν ἄνθρωπον ἀνήγαγον
970 ἀπὸ Κρομμυῶνος. ὁ δὲ κύων ἀναστρέψας προηγεῖτο
γαῦρος καὶ περιχαρής, οἷον ἑαυτοῦ ποιούμενος ἄγ-
ραν καὶ θήραμα τὸν ἱερόσυλον. ἐψηφίσαντο δὴ
σῖτον αὐτῷ δημοσίᾳ μετρεῖσθαι καὶ παρεγγυᾶσθαι
τοῖς ἱερεῦσιν εἰς ἀεὶ τὴν ἐπιμέλειαν, ἀπομιμησά-
μενοι τὸ πρὸς τὸν ἡμίονον φιλανθρώπευμα τῶν
παλαιῶν Ἀθηναίων. τὸν γὰρ ἑκατόμπεδον νεὼν
Περικλέους ἐν ἀκροπόλει κατασκευάζοντος, ὡς
εἰκός, λίθοι προσήγοντο πολλοῖς ζεύγεσι καθ' ἡμέ-
ραν· τῶν οὖν συνειργασμένων μὲν προθύμως ἤδη
δὲ διὰ γῆρας ἀφειμένων ὀρέων εἷς κατερχόμενος εἰς
B Κεραμεικὸν καὶ τοῖς ἀνάγουσι ζεύγεσι τοὺς λίθους
ὑπαντῶν ἀεὶ συνανέστρεφε καὶ συμπαρετρόχαζεν,
οἷον ἐγκελευόμενος καὶ παρορμῶν· διὸ θαυμάσας
αὐτοῦ τὴν φιλοτιμίαν ὁ δῆμος ἐκέλευσε δημοσίᾳ
τρέφεσθαι, καθάπερ ἀθλητῇ σίτησιν ὑπὸ γήρως
ἀπειρηκότι ψηφισάμενος.

14. Διὸ τοὺς λέγοντας, ὡς ἡμῖν οὐδὲν πρὸς τὰ ζῷα δίκαιόν ἐστι, ῥητέον εὖ λέγειν ἄχρι τῶν ἐνάλων καὶ βυθίων· ἄμικτα γὰρ ἐκεῖνα κομιδῇ πρὸς χάριν

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[a] Better known as the Parthenon; *cf. Mor.* 349 D, *Life of Pericles*, xiii. 7 (159 E).

[b] *Cf. Life of Cato Maior*, v. 3 (339 A-B). Aelian, *De Natura Animal.* vi. 49, agrees in the main with Plutarch's account; Aristotle, *Historia Animal.* vi. 24 (577 B 34), says merely that a public decree was passed forbidding bakers to drive the creature away from their trays. He adds that the

on the road and barking at the man and sticking to his heels. When those who were investigating the robbery learned this from men who had encountered the pair and were told the colour and size of the dog, they pursued all the more vigorously and overtook the man and brought him back from Crommyon. On the return the dog led the procession, capering and exultant, as though it claimed for itself the credit for pursuing and capturing the temple-thief. The people actually voted it a public ration of food and entrusted the charge of this to the priests in perpetuity, thereby imitating the ancient Athenian kindness to the mule. For when Pericles was building the Hecatompedon [a] on the Acropolis, stones were naturally brought by numerous teams of draught-animals every day. Now one of the mules who had assisted gallantly in the work, but had now been discharged because of old age, used to go down every day to the Ceramicus and meet the beasts which brought the stones, turning back with them and trotting along by their side, as though to encourage and cheer them on. So the people of Athens, admiring its enterprise, gave orders for it to be maintained at the public expense, voting it free meals, as though to an athlete who had succumbed to old age.[b]

14.[c] Therefore those who deny that there is any kind of justice owed to animals [d] by us must be conceded to be right so far as marine and deep-sea creatures [e] are concerned; for these are completely

mule was 80 years old and is followed by Pliny, *Nat. Hist.* viii. 175.

[c] There is probably a lacuna before this chapter.

[d] *Cf.* 999 B *infra*; 964 B *supra*.

[e] *Cf.* additional sources cited by Mair on Oppian, *Hal.* ii. 43.

(970) καὶ ἄστοργα καὶ πάσης ἄμοιρα γλυκυθυμίας· καὶ καλῶς Ὅμηρος εἶπε

γλαυκὴ δέ σ' ἔτικτε θάλασσα

πρὸς τὸν ἀνήμερον εἶναι δοκοῦντα καὶ ἄμικτον, ὡς μηδὲν τῆς θαλάσσης εὐνοϊκὸν μηδὲ πρᾶον φερού-
C σης. ὁ δὲ καὶ πρὸς τὰ χερσαῖα τῷ λόγῳ τούτῳ χρώμενος ἀπηνὴς καὶ θηριώδης· ἢ μηδὲ[1] Λυσιμάχῳ τι γεγονέναι φήσῃ[2] πρὸς τὸν κύνα τὸν Ὑρκανὸν δίκαιον, ὃς νεκρῷ τε μόνος παρέμεινεν αὐτῷ καί, καομένου τοῦ σώματος, ἐνδραμὼν αὐτὸς ἑαυτὸν ἐπέρριψε. τὰ δ' αὐτὰ καὶ τὸν ἀετὸν[3] δρᾶσαι λέγουσιν, ὃν Πύρρος οὐχ ὁ βασιλεὺς ἀλλ' ἕτερός τις ἰδιώτης ἔθρεψεν· ἀποθανόντος γὰρ αὐτοῦ περὶ τὸ σῶμα διατρίβων καὶ περὶ τὸ κλινίδιον αἰωρούμενος ἐκφερομένου, τέλος εἰς τὴν πυρὰν στειλάμενος ἀφῆκεν ἑαυτὸν καὶ συγκατέκαυσε.

Πώρου δὲ τοῦ βασιλέως ὁ ἐλέφας, ἐν τῇ πρὸς Ἀλέξανδρον μάχῃ κατατετρωμένου, πολλὰ τῶν
D ἀκοντισμάτων ἀτρέμα καὶ φειδόμενος ἐξῄρει τῇ προβοσκίδι, καὶ κακῶς ἤδη διακείμενος αὐτὸς οὐ πρότερον ἐνέδωκεν ἢ τοῦ βασιλέως ἐξαίμου γενο-

[1] ἢ μηδὲ E only : εἰ δὲ μή. [2] φήσῃ Madvig : φήσει.
[3] ἀετὸν Emperius : ἀστὸν and αὐτὸν.

[a] *Iliad*, xvi. 34.
[b] *Mor.* 821 A : the companion and successor of Alexander (*c.* 360–281 B.C.). *Cf.* Pliny, *Nat. Hist.* viii. 143 ; Aelian, *De Natura Animal.* vi. 25 ; and ii. 40 (*cf.* vi. 29), of eagles.

lacking in amiability, apathetic, and devoid of all sweetness of disposition. And well did Homer [a] say

The gray-green sea bore you,

with reference to a man regarded as uncivilized and unsociable, implying that the sea produces nothing friendly or gentle. But a man who would use such speech in regard to land animals is himself cruel and brutal. Or perhaps you will not admit that there was a bond of justice between Lysimachus [b] and the Hyrcanian dog which alone stood guard by his corpse and, when his body was cremated, rushed into the flames and hurled itself upon him.[c] The same is reported to have been done by the eagle [d] which was kept by Pyrrhus, not the king, but a certain private citizen ; when he died, it kept vigil by his body ; at the funeral it hovered about the bier and finally folded its wings, settled on the pyre and was consumed with its master's body.

The elephant of King Porus,[e] when he was wounded in the battle against Alexander, gently and solicitously pulled out with its trunk many [f] of the javelins sticking in its master. Though it was in a sad state itself, it did not give up until it perceived that the

It may be conjectured that ii. 40 was derived from an original in which ἀετῶν was confused with κυνῶν, as *infra*.

[c] Similar stories in Aelian, *De Natura Animal.* vii. 40.

[d] "Dog" and "eagle" are again confused ; but the "hovering" is here decisive. (*Cf.* also Wilamowitz, *Hermes*, lxiii, p. 380.) The dog reappears in Pollux, v. 42 (where it is King Pyrrhus), an eagle in a similar tale in Pliny, *Nat. Hist.* x. 18, while Pyrrhus is the name of a dog in Pliny, viii. 144.

[e] *Life of Alexander*, lx. 13 (699 B-C), with Ziegler's references *ad loc.*

[f] "Each one of the spears" in the *Life of Alexander.*

(970) μένου καὶ περιρρέοντος αἰσθόμενος[1] καὶ φοβηθεὶς μὴ πέσῃ πράως ὑφῆκε, παρέχων ἐκείνῳ τὴν ἀπόκλισιν ἄλυπον.

Ὁ δὲ Βουκεφάλας γυμνὸς μὲν ὢν παρεῖχεν ἀναβῆναι τῷ ἱπποκόμῳ, κοσμηθεὶς δὲ τοῖς βασιλικοῖς προκοσμίοις καὶ περιδεραίοις οὐδένα προσίετο πλὴν αὐτὸν Ἀλέξανδρον· τοῖς δ' ἄλλοις, εἰ πειρώμενοι προσίοιεν, ἐναντίος ἐπιτρέχων ἐχρεμέτιζε μέγα καὶ
E ἐνήλλετο[2] καὶ κατεπάτει τοὺς μὴ πρόσω ἵεσθαι μηδ' ἀποφεύγειν φθάσαντας.

15. Οὐκ ἀγνοῶ δ' ὅτι τὸ[3] τῶν παραδειγμάτων ὑμῖν φανεῖταί τι ποικίλον· οὐκ ἔστι δὲ ῥᾳδίως τῶν εὐφυῶν ζῴων πρᾶξιν εὑρεῖν μιᾶς ἔμφασιν ἀρετῆς ἔχουσαν· ἀλλ' ἐμφαίνεται καὶ τῷ φιλοστόργῳ τὸ φιλότιμον αὐτῶν καὶ τῷ γενναίῳ τὸ θυμόσοφον, ἥ τε πανουργία καὶ τὸ συνετὸν οὐκ ἀπήλλακται τοῦ θυμοειδοῦς καὶ ἀνδρώδους. οὐ μὴν ἀλλὰ βουλομένοις διαιρεῖν καὶ διορίζειν καθ' ἕκαστον, ἡμέρου μὲν ἔμφασιν ὁμοῦ καὶ ὑψηλοῦ φρονήματος ποιοῦσιν οἱ κύνες, ἀποτρεπόμενοι τῶν συγκαθεζομένων· ὥς που καὶ ταῦτ' εἴρηται

F οἱ μὲν κεκλήγοντες ἐπέδραμον· αὐτὰρ Ὀδυσσεὺς
ἕζετο κερδοσύνῃ, σκῆπτρον δέ οἱ ἔκπεσε χειρός·

οὐκέτι γὰρ προσμάχονται τοῖς ὑποπεσοῦσι καὶ γεγονόσι ταπεινοῖς τὰς ἕξεις ὁμοίοις.

[1] αἰσθόμενος Dübner: αἰσθανόμενος.
[2] ἐνήλλετο Dübner: συνήλλετο.
[3] τὸ added by Wyttenbach.

[a] Other stories of humane elephants in Aelian, *De Natura Animal.* iii. 46; *al.*

[b] *Cf.* Pliny, *Nat. Hist.* viii. 154; Gellius, *Noctes Atticae*, v. 2; and see the parallels collected by Sternbach, *Wiener*

king had lost much blood and was slipping off; then, fearing that he would fall, it gently kneeled and afforded its master a painless glide.[a]

Bucephalas[b] unsaddled would permit his groom to mount him; but when he was all decked out in his royal accoutrements and collars, he would let no one approach except Alexander himself. If any others tried to come near, he would charge at them loudly neighing and rear and trample any of them who were not quick enough to rush far away and escape.

15. I am not unaware that you will think that my examples are rather a hodge-podge: but it is not easy to find naturally clever animals doing anything which illustrates merely one of their virtues. Their probity, rather, is revealed in their love of offspring and their cleverness in their nobility; then, too, their craftiness and intelligence is inseparable from their ardour and courage. Those, nevertheless, who are intent on classifying and defining each separate occasion will find that dogs give the impression of a mind that is at once civil and superior when they turn away from those who sit on the ground—which is presumably referred to in the lines[c]

> The dogs barked and rushed up, but wise Odysseus
> Cunningly crouched: the staff slipped from his hand:

for dogs cease attacking those who have thrown themselves down and taken on an attitude that resembles humility.[d]

Studien, xvi, pp. 17 f. The story is omitted by Plutarch in the *Life of Alexander*.

[c] Homer, *Odyssey*, xiv. 30 f.; *cf.* Pliny, *Nat. Hist.* viii. 146; Antigonus, *Hist. Mirab.* 24; Aristotle, *Rhetoric*, ii. 3. 6 (1380 a 24).

[d] *Cf.* Pliny, *Nat. Hist.* viii. 48, of the lion.

(970) Φασὶ δὲ καὶ τὸν πρωτεύοντα κύνα τῶν Ἰνδικῶν τὸν μάλιστα θαυμασθέντα πρὸς Ἀλεξάνδρου,[1] ἐλάφου μὲν[2] ἀφιεμένου καὶ κάπρου καὶ ἄρκτου, ἡσυχίαν ἔχοντα κεῖσθαι καὶ περιορᾶν, ὀφθέντος δὲ λέοντος, εὐθὺς ἐξαναστῆναι καὶ διακονίεσθαι καὶ
971 φανερὸν εἶναι αὑτοῦ ποιούμενον ἀνταγωνιστήν, τῶν δ' ἄλλων ὑπερφρονοῦντα πάντων.

Οἱ δὲ τοὺς δασύποδας διώκοντες, ἐὰν μὲν αὐτοὶ κτείνωσιν, ἥδονται διασπῶντες καὶ τὸ αἷμα λάπτουσι προθύμως· ἐὰν δ' ἀπογνοὺς ἑαυτὸν ὁ λαγωός, ὃ γίνεται πολλάκις, ὅσον ἔχει πνεύματος εἰς τὸν ἔσχατον ἀναλώσας δρόμον ἐκλίπῃ, νεκρὸν καταλαβόντες οὐκ ἅπτονται τὸ παράπαν, ἀλλ' ἵστανται τὰς οὐρὰς κινοῦντες, ὡς οὐ κρεῶν χάριν ἀλλὰ νίκης καὶ φιλονικίας ἀγωνιζόμενοι.

16. Πανουργίας δὲ πολλῶν παραδειγμάτων ὄντων, ἀφεὶς ἀλώπεκας καὶ λύκους καὶ τὰ γεράνων
B σοφίσματα καὶ κολοιῶν, ἔστι γὰρ δῆλα, μάρτυρι χρήσομαι Θαλῇ τῷ παλαιοτάτῳ τῶν σοφῶν, ὃν οὐχ ἥκιστα θαυμασθῆναι λέγουσιν ὀρέως[3] τέχνῃ περιγενόμενον. τῶν γὰρ ἁληγῶν ἡμιόνων εἷς ἐμβαλὼν εἰς ποταμὸν ὤλισθεν αὐτομάτως καὶ τῶν ἁλῶν διατακέντων ἀναστὰς ἐλαφρὸς ᾔσθετο τὴν αἰτίαν καὶ

[1] τὸν (W. C. H.) μάλιστα θαυμασθέντα πρὸς Ἀλεξάνδρου van Herwerden : καὶ μαχεσθέντα πρὸς Ἀλέξανδρον.
[2] μὲν added by Benseler.
[3] ὀρέως Amyot : ὀρθῶς.

[a] There are nearly as many emendations of this phrase as there have been scholars interested in Plutarch's text. Van Herwerden's version, as having the liveliest sense, has been preferred. It is by no means certain, however, though supported by Aelian, *De Natura Animal.* viii. 1 ; Pliny, *Nat.*

They relate further that the champion of the Indian dogs, one greatly admired by Alexander,[a] when a stag was let loose and a boar and a bear, lay quiet and still and disregarded them ; but when a lion appeared, it sprang up at once to prepare for the fray, showing clearly that it chose to match itself with the lion [b] and scorned all the others.

Hounds that hunt hares, if they themselves kill them, enjoy pulling them to pieces [c] and eagerly lap up the blood ; but if, as frequently happens, a hare in desperation exhausts all its breath in a final sprint and expires, the hounds, when they come upon it dead, will not touch it at all, but stand there wagging their tails, as much as to say that they do not strive for food, but for victory and the honour of winning.

16. There are many examples of cunning, but I shall dismiss foxes and wolves [d] and the tricks of crane and daw (for they are obvious), and shall take for my witness Thales,[e] the most ancient of the Wise Men,[f] not the least of whose claims to admiration, they say, was his getting the better of a mule by a trick. For one of the mules that were used to carry salt, on entering a river, accidentally stumbled and, since the salt melted away, it was free of its burden when it got up. It recognized the cause of this and

Hist. viii. 149 ; *cf.* also Pollux, v. 43-44 and the parallels cited by Bethe *ad loc.* See also Aelian, iv. 19 and Diodorus, xvii. 94.

[b] Pliny, *Nat. Hist.* viii. 149 f., adds the elephant as a worthy match.

[c] So " break up " : Xenophon, *Cynegetica*, vii. 9.

[d] *Cf.* Pindar, *Pythians*, ii. 84 ; Oppian, *Cynegetica*, iii. 266.

[e] Omitted in Diels-Kranz, *Frag. der Vorsok.*, not without reason. *Cf.* Aelian, *De Natura Animal.* vii. 42.

[f] See the *Septem Sapientium Convivium* (*Mor.* 146 B ff.).

(971) κατεμνημόνευσεν· ὥστε διαβαίνων ἀεὶ τὸν ποταμόν, ἐπίτηδες ὑφιέναι καὶ βαπτίζειν τὰ ἀγγεῖα, συγκαθίζων καὶ ἀπονεύων εἰς ἑκάτερον μέρος· ἀκούσας οὖν ὁ Θαλῆς ἐκέλευσεν ἀντὶ τῶν ἁλῶν ἐρίων τὰ ἀγγεῖα καὶ σπόγγων ἐμπλήσαντας καὶ ἀναθέντας,
C ἐλαύνειν τὸν ἡμίονον. ποιήσας οὖν τὸ εἰωθὸς καὶ ἀναπλήσας ὕδατος τὰ φορτία συνῆκεν ἀλυσιτελῆ σοφιζόμενος ἑαυτῷ, καὶ τὸ λοιπὸν οὕτω προσέχων καὶ φυλαττόμενος διέβαινε τὸν ποταμόν, ὥστε μηδ' ἄκοντος αὐτοῦ τῶν φορτίων παραψαῦσαι τὸ ὑγρόν.

Ἄλλην δὲ πανουργίαν ὁμοῦ μετὰ τοῦ φιλοστόργου πέρδικες ἐπιδεικνύντες τοὺς μὲν νεοττοὺς ἐθίζουσι μηδέπω φεύγειν δυναμένους, ὅταν διώκωνται, καταβαλόντας ὑπτίους ἑαυτοὺς βῶλόν τινα ἢ συρφετὸν ἄνω προΐσχεσθαι τοῦ σώματος οἷον ἐπηλυγαζομένους· αὐταὶ[1] δὲ τοὺς διώκοντας ὑπάγουσιν ἄλλῃ καὶ περισπῶσιν εἰς[2] ἑαυτάς, ἐμποδὼν διαπετόμεναι
D καὶ κατὰ μικρὸν ἐξανιστάμεναι, μέχρις ἂν ὅσον οὔπω γ'[3] ἁλισκομένων δόξαν ἐνδιδοῦσαι, μακρὰν ἀποσπάσωσι τῶν νεοττῶν.

Οἱ δὲ δασύποδες πρὸς εὐνὴν ἐπανιόντες ἄλλον ἀλλαχῇ κοιμίζουσι[4] τῶν λαγιδέων, καὶ πλέθρου διάστημα πολλάκις ἀλλήλων ἀπέχοντας, ὅπως, ἂν ἄνθρωπος ἢ κύων ἐπίῃ, μὴ πάντες ἅμα συγκινδυ-

[1] αὐταὶ Reiske : αὗται.
[2] εἰς added by early editors.
[3] ὅσον οὔπω γ' Naber and W. C. H. : οὕτως.

bore it in mind. The result was that every time it crossed the river, it would deliberately lower itself and wet the bags, crouching and bending first to one side, then to the other. When Thales heard of this, he gave orders to fill the bags with wool and sponges instead of salt and to drive the mule laden in this manner. So when it played its customary trick and soaked its burden with water, it came to know that its cunning was unprofitable and thereafter was so attentive and cautious in crossing the river that the water never touched the slightest portion of its burden even by accident.

Partridges [a] exhibit another piece of cunning, combined with affection for their young. They teach their fledglings, who are not yet able to fly, to lie on their backs when they are pursued and to keep above them as a screen some piece of turf or rubbish. The mothers meanwhile lure the hunters in another direction and divert attention to themselves, fluttering along at their feet and rising only briefly until, by making it seem that they are on the point of being captured, they draw them far away from their young.

When hares [b] return for repose, they put to sleep their leverets in quite different places, often as much as a hundred feet apart, so that, if man or dog comes near, they shall not all be simultaneously in danger.

[a] *Cf.* 992 B *infra* : *Mor.* 494 E and the references there : add Pliny, *Nat. Hist.* x. 103; Philo, 35 (p. 117) (probably referring to partridges, though the Latin version reads *palumbae*): Antigonus, *Hist. Mirab.* 39 ; Aelian, *De Natura Animal.* iii. 16; xi. 38; Aristotle, *Historia Animal.* 613 b 31.

[b] *Cf.* Aelian, *De Natura Animal.* xiii. 11 ; vi. 47.

[4] κοιμίζουσι some MSS. : κομίζουσι.

(971) νεύωσιν· αὐτοὶ δὲ πολλαχόθι ταῖς μεταδρομαῖς ἴχνη θέντες, τὸ δ' ἔσχατον ἅλμα μέγα καὶ μακρὰν τῶν ἰχνῶν ἀποσπάσαντες οὕτω καθεύδουσιν.

Ἡ δ' ἄρκτος ὑπὸ τοῦ πάθους, ὃ καλοῦσι φωλείαν,[1] καταλαμβανομένη, πρὶν ἢ παντάπασι ναρ-
E κῆσαι καὶ γενέσθαι βαρεῖα καὶ δυσκίνητος, τόν τε τόπον ἀνακαθαίρει καὶ μέλλουσα καταδύεσθαι τὴν μὲν ἄλλην πορείαν ὡς ἐνδέχεται μάλιστα ποιεῖται μετέωρον καὶ ἐλαφρὰν ἄκροις ἐπιθιγγάνουσα τοῖς ἴχνεσι, τῷ νώτῳ δὲ τὸ σῶμα προσάγει καὶ παρακομίζει πρὸς τὸν φωλεόν.

Τῶν ἐλάφων[2] δ' αἱ θήλειαι μάλιστα τίκτουσι παρὰ τὴν ὁδόν, ὅπου τὰ σαρκοβόρα θηρία μὴ πρόσεισιν· οἵ τ' ἄρρενες, ὅταν αἴσθωνται βαρεῖς ὑπὸ πιμελῆς καὶ πολυσαρκίας ὄντες, ἐκτοπίζουσι σῴζοντες αὑτοὺς τῷ λανθάνειν, ὅτε τῷ φεύγειν οὐ[3] πεποίθασιν.

Τῶν δὲ χερσαίων ἐχίνων ἡ μὲν ὑπὲρ αὑτῶν ἄμυνα
F καὶ φυλακὴ παροιμίαν πεποίηκε

πόλλ' οἶδ' ἀλώπηξ, ἀλλ' ἐχῖνος ἓν μέγα·

[1] φωλείαν Reiske: φωλίαν or φωλία.
[2] τῶν ἐλάφων Jannotius: τῶν ἐλεφάντων.
[3] οὐ] οὐκέτι W. C. H.

[a] Cf. Aelian, *De Natura Animal.* vi. 3; Pliny, *Nat. Hist.* viii. 126 f.; Mair on Oppian, *Cyn.* iii. 173 (L.C.L.).

The hares themselves run to and fro and leave tracks in many places, but last of all with a great leap they leave their traces far behind, and so to bed.

The she-bear, just prior to the state called hibernation,[a] before she becomes quite torpid and heavy and finds it difficult to move, cleans out her lair and, when about to enter, approaches it as lightly and inconspicuously as possible, treading on tiptoe, then turns around and backs into the den.[b]

Hinds are inclined to bear their young beside a public road where carnivorous animals do not come [c]; and stags, when they observe that they have grown heavy by reason of their fat and surplus flesh, vanish and preserve themselves by hiding when they do not trust to their heels.[d]

The way in which hedgehogs defend and guard themselves has occasioned the proverb [e]:

The fox knows many tricks, but the hedgehog one big one:

[b] These precautions seem to have been successful (though *cf.* the implications of Pliny, *Nat. Hist.* viii. 128), since Aristotle (*Historia Animal.* viii. 17, 600 b 6 f.) says that "either no one (or very few)" has ever caught a pregnant bear. *Cf.* Pliny, *Nat. Hist.* viii. 95 and Amm. Marc. xxii. 15. 22, of the hippopotamus entering a field backwards.

[c] Aristotle (*Historia Animal.* ix. 5, 611 a 17) notes that highways were shunned by wild animals because they feared men. *Cf.* also Antigonus, *Hist. Mirab.* 35 and Mair on Oppian, *Cyn.* ii. 207 (L.C.L.).

[d] *Cf.* Pliny, *Nat. Hist.* viii. 113; [Aristotle], *De Mir. Ausc.* 5; *Historia Animal.* 611 a 23.

[e] See Shorey on Plato, *Republic*, 423 E (L.C.L.): Leutsch and Schneidewin, *Paroemiographi Graeci*, i, p. 147, Zenobius, v. 68; attributed by Zenobius to Archilochus (Diehl, *Anthologia Lyrica*, i, p. 241, frag. 103; Edmonds, *Elegy and Iambus*, ii, p. 174, frag. 118) and to Homer. Zenobius also quotes five lines from Ion, of which the last two are Plutarch's next quotation.

(971) προσιούσης γὰρ αὐτῆς, ὥς φησιν ὁ Ἴων,[1]

> στρόβιλος ἀμφάκανθον[2] εἱλίξας δέμας,
> κεῖται θιγεῖν τε καὶ δακεῖν ἀμήχανος.

γλαφυρωτέρα δ' ἐστὶν ἡ περὶ τῶν σκυμνίων πρόνοια· μετοπώρου γὰρ ὑπὸ τὰς ἀμπέλους ὑποδυόμενος, καὶ τοῖς ποσὶ τὰς ῥᾶγας ἀποσείσας τοῦ βότρυος χαμᾶζε καὶ περικυλινδηθείς, ἀναλαμβάνει
972 ταῖς ἀκάνθαις· καὶ παρέσχε ποτὲ παισὶν[3] ἡμῖν ὁρῶσιν ὄψιν ἑρπούσης ἢ βαδιζούσης σταφυλῆς[4]· εἶτα καταδὺς εἰς τὸν φωλεὸν τοῖς σκύμνοις χρῆσθαι καὶ λαμβάνειν ἀφ' αὑτοῦ ταμιευομένοις[5] παραδίδωσι. τὸ δὲ κοιταῖον αὐτῶν ὀπὰς ἔχει δύο, τὴν μὲν πρὸς νότον τὴν δὲ πρὸς βορέαν βλέπουσαν· ὅταν δὲ προαίσθωνται τὴν διαφορὰν τοῦ ἀέρος, ὥσπερ ἱστίον κυβερνῆται μεταλαμβάνοντες ἐμφράττουσι τὴν κατ' ἄνεμον τὴν δ' ἑτέραν ἀνοίγουσι. καὶ τοῦτό τις ἐν Κυζίκῳ καταμαθὼν δόξαν ἔσχεν ὡς ἀφ' αὑτοῦ τὸν μέλλοντα πνεῖν ἄνεμον προαγορεύων.

B 17. Τό γε μὴν κοινωνικὸν μετὰ τοῦ συνετοῦ τοὺς ἐλέφαντας ἀποδείκνυσθαί φησιν ὁ Ἰόβας. ὀρύγματα γὰρ αὐτοῖς οἱ θηρεύοντες ὑπεργασάμενοι λεπτοῖς φρυγάνοις καὶ φορυτῷ[6] κούφῳ κατερέφου-

[1] ὁ Ἴων Meziriacus : οἷον.
[2] ἀμφάκανθον Salmasius : ἀμφ' ἄκανθαν.
[3] παισὶν Kronenberg : πᾶσιν.
[4] σταφυλῆς] the MSS. add οὕτως ἀνάπλεως ἐχώρει τῆς ὀπώρας, deleted by W. C. H.
[5] ταμιευόμενος Andrews : -ομένου W. C. H.
[6] φορυτῷ Meziriacus : φόρτῳ.

[a] Nauck, *Trag. Graec. Frag.* p. 739 ; frag. 38, verses 4 f. (see the preceding note).
[b] The MSS. add an unnecessary explanation : "so covered

for when the fox approaches, as Ion [a] says, it,

> Curling its spiny body in a coil,
> Lies still, impregnable to touch or bite.

But the provision that the hedgehog makes for its young is even more ingenious. When autumn comes, it creeps under the vines and with its paws shakes down to the ground grapes from the bunches and, having rolled about in them, gets up with them attached to its quills. Once when I was a child I saw one, like a creeping or walking bunch of grapes ! [b] Then it goes down into its hole and delivers the load to its young for them to enjoy and draw rations from. Their lair has two openings, one facing the south, the other the north ; when they perceive that the wind will change, like good skippers who shift sail, they block up the entrance which lies to the wind and open the other.[c] And a man in Cyzicus [d] observing this acquired a reputation for being able to predict unaided which way the wind would blow.

17. Elephants, as Juba [e] declares, exhibit a social capacity joined with intelligence. Hunters dig pits for them, covering them with slender twigs and

with fruit was it as it walked." *Cf.* Pliny, *Nat. Hist.* viii. 133 ; Aelian, *De Natura Animal.* iii. 10 ; *Anth. Pal.* vi. 169.

[c] *Cf.* 979 A *infra* ; Aristotle, *Historia Animal.* ix. 6 (612 b 4 ff.) ; Pliny, *Nat. Hist.* viii. 133 ; *cf.* viii. 138, of squirrels. On animals who predict the weather see Pliny, *Nat. Hist.* xviii. 361-364.

[d] Aristotle (*loc. cit.*) says Byzantium (and see *infra*, 979 B).

[e] Müller, *Frag. Hist. Graec.* iii, p. 474 ; Jacoby, *Frag. der griech. Hist.* iii, pp. 146 f., frag. 51a, 53 ; *cf.* Pliny, *Nat. Hist.* viii. 24 ; Aelian, *De Natura Animal.* viii. 15 ; vi. 61 ; and see the criticism in 977 D-E *infra.* On the mutual assistance of elephants see Philostratus, *Vita Apoll.* ii. 16.

(972) σιν· ὅταν οὖν τις εἰσολίσθῃ, πολλῶν ὁμοῦ πορευομένων, οἱ λοιποὶ φοροῦντες ὕλην καὶ λίθους ἐμβάλλουσιν, ἀναπληροῦντες τὴν κοιλότητα τοῦ ὀρύγματος, ὥστε ῥᾳδίαν ἐκείνῳ γίνεσθαι τὴν ἔκβασιν. ἱστορεῖ δὲ καὶ εὐχῇ χρῆσθαι θεῶν τοὺς ἐλέφαντας ἀδιδάκτως, ἁγνιζομένους τε τῇ θαλάσσῃ καὶ τὸν ἥλιον ἐκφανέντα προσκυνοῦντας ὥσπερ χειρὸς ἀνασχέσει τῆς προβοσκίδος. ὅθεν καὶ θεοφιλέστα-
C τόν ἐστι τὸ θηρίον, ὡς Πτολεμαῖος ὁ Φιλοπάτωρ ἐμαρτύρησε. κρατήσας γὰρ Ἀντιόχου καὶ βουλόμενος ἐκπρεπῶς τιμῆσαι τὸ θεῖον ἄλλα τε πάμπολλα κατέθυσεν ἐπινίκια τῆς μάχης καὶ τέσσαρας ἐλέφαντας· εἶτα νύκτωρ ὀνείρασιν ἐντυχών, ὡς τοῦ θεοῦ μετ' ὀργῆς ἀπειλοῦντος αὐτῷ διὰ τὴν ἀλλόκοτον ἐκείνην θυσίαν, ἱλασμοῖς τε πολλοῖς ἐχρήσατο καὶ χαλκοῦς ἐλέφαντας ἀντὶ τῶν σφαγέντων ἀνέστησε τέσσαρας.

Οὐχ ἧττον δὲ κοινωνικὰ τὰ τῶν λεόντων. οἱ γὰρ νέοι τοὺς βραδεῖς καὶ γέροντας ἤδη συνεξάγουσιν ἐπὶ θήραν· ὅπου δ' ἂν ἀπαγορεύσωσιν, οἱ μὲν κάθηνται περιμένοντες οἱ δὲ θηρεύουσι· κἂν λάβω-
D σιν ὁτιοῦν, ἀνακαλοῦνται, μόσχου μυκήματι τὸ βρύχημα ποιοῦντες ὅμοιον· οἱ δ' εὐθὺς αἰσθάνονται καὶ παραγενόμενοι κοινῇ τὴν ἄγραν ἀναλίσκουσιν.

18. Ἔρωτες δὲ θηρίων[1] οἱ μὲν ἄγριοι καὶ περιμανεῖς γεγόνασιν, οἱ δ' ἔχοντες οὐκ ἀπάνθρωπον

[1] θηρίων W. C. H. : πολλῶν.

[a] *Cf.* Pliny, *Nat. Hist.* viii. 1 f. ; Dio Cassius, xxxix. 38. 5.

light rubbish; when, accordingly, any elephant of a number travelling together falls in, the others bring wood and stones and throw them in to fill up the excavation so that their comrade can easily get out. He also relates that, without any instruction, elephants pray to the gods, purifying themselves in the sea [a] and, when the sun [b] rises, worshipping it by raising their trunks, as if they were hands of supplication. For this reason they are the animal most loved of the gods, as Ptolemy Philopator [c] has testified; for when he had vanquished Antiochus and wished to honour the gods in a really striking way, among many other offerings to commemorate his victory in battle, he sacrificed four elephants. Thereafter, since he had dreams by night in which the deity angrily threatened him because of that strange sacrifice, he employed many rites of appeasement and set up as a votive offering four bronze elephants to match those he had slaughtered.

Social usages are to be found no less among lions. For young lions take along with them to the hunt the old and slow; when the latter are tired out, they rest and wait, while the young lions hunt on. When they have taken anything, they summon the others by a roaring like the bleat of a calf; the old ones hear it at once and come to partake in common of the prey.[d]

18. The loves of some animals are wild and furious, while others have a refinement which is not far from

[b] The moon in Aelian, *De Natura Animal.* iv. 10, but the sun in vii. 44; of tigers in Philostratus, *Vita Apoll.* ii. 28.

[c] Aelian, *De Natura Animal.* vii. 44: Ptolemy IV (*c.* 244–205 B.C.), who reigned 221-205. The decisive defeat of Antiochus III was at Raphia in 217. For the gods loving elephants see Aelian, *De Natura Animal.* vii. 2; *al.*

[d] *Cf.* Aelian, *De Natura Animal.* ix. 1.

(972) ὡραϊσμὸν οὐδ' ἀναφρόδιτον ὁμιλίαν. οἷος ἦν ὁ τοῦ ἐλέφαντος ἐν Ἀλεξανδρείᾳ τοῦ ἀντερῶντος Ἀριστοφάνει τῷ γραμματικῷ· τῆς γὰρ αὐτῆς ἤρων στεφανοπώλιδος, καὶ οὐχ ἧττον ἦν ὁ ἐλέφας διάδηλος· ἔφερε γὰρ αὐτῇ τῆς ὀπώρας ἀεὶ τὰ[1] πρατήρια παραπορευόμενος, καὶ χρόνον πολὺν ὑφίστατο καὶ τὴν προβοσκίδα τῶν χιτωνίων ἐντὸς ὥσπερ χεῖρα
E παραβαλὼν ἀτρέμα τῆς περὶ τὸ στῆθος ὥρας ἔψαυεν.

Ὁ δὲ δράκων ὁ τῆς Αἰτωλίδος ἐρασθεὶς ἐφοίτα νύκτωρ παρ' αὐτὴν καὶ τοῦ σώματος ὑποδυόμενος ἐν χρῷ καὶ περιπλεκόμενος οὐδὲν οὔθ' ἑκὼν οὔτ' ἄκων ἔβλαψεν, ἀλλὰ κοσμίως ἀεὶ περὶ τὸν ὄρθρον ἀπηλλάττετο. συνεχῶς δὲ τοῦτο ποιοῦντος αὐτοῦ, μετῴκισαν οἱ προσήκοντες ἀπωτέρω τὴν ἄνθρωπον. ὁ δὲ τρεῖς μὲν ἢ τέτταρας νύκτας[2] οὐκ ἦλθεν ἀλλ' ὡς ἔοικε περιῄει ζητῶν καὶ πλανώμενος· μόλις δέ πως ἐξανευρὼν καὶ περιπεσὼν οὐ πρᾶος[3] ὥσπερ εἰώθει ἀλλὰ τραχύτερος, τῷ μὲν ἄλλῳ σπει-
F ράματι τὰς χεῖρας αὐτῆς ἔδησε πρὸς τὸ σῶμα, τῷ δ' ἀπολήγοντι τῆς οὐρᾶς ἐμαστίγου τὰς κνήμας, ἐλαφράν τινα καὶ φιλόστοργον καὶ πλέον ἔχουσαν τοῦ κολάζοντος τὸ φειδόμενον ὀργὴν ἀποδεικνύμενος.

Τὸν δ' ἐν Αἰγίῳ[4] παιδεραστοῦντα χῆνα καὶ τὸν ἐπιθυμήσαντα Γλαύκης τῆς κιθαρῳδοῦ κριόν, περι-

[1] τὰ added by Bernardakis, after Reiske.
[2] νύκτας added by Wyttenbach.
[3] πρᾶος Bernardakis : πράως.
[4] Αἰγίῳ Aelian : αἰπῶ or αἰγύπτῳ.

[a] *Cf.* Aelian, *De Natura Animal.* i. 38 (*cf.* vii. 43) ; Pliny, *Nat. Hist.* viii. 13.

human and an intercourse conducted with much grace. Such was the elephant which at Alexandria played the rival to Aristophanes [a] the grammarian. They were, in fact, in love with the same flower-girl; nor was the elephant's love the less manifest: as he passed by the market, he always brought her fruit and stood beside her for a long time and would insert his trunk, like a hand,[b] within her garments and gently caress her fair breasts.

The serpent that fell in love with an Aetolian woman [c] used to visit her at night and slip under some part of her body next the skin and coil about her without doing her any harm at all, either intentional or accidental; but always at daybreak it was decent enough to glide away. And this it did constantly until the kinsmen of the woman removed her to a house at some distance. The serpent did not come to her for three or four nights; but all the time, we may suppose, it was going about in search of her and missing its goal. At last, when it had somehow found her with difficulty, it embraced her, not with that former gentleness it had used, but rather more roughly, its coils binding her hands to her body, and with the end of its tail it lashed the calves of her legs, displaying a light and tender anger that had in it more indulgence than punishment.

As for the goose in Aegium that loved a boy and the ram that set his heart on Glauce [d] the harp-

[b] *Cf.* Mair on Oppian, *Cyn.* ii. 524 for additional authorities.

[c] Told somewhat differently, and of a Jewish woman, in Aelian, *De Natura Animal.* vi. 17.

[d] Also a goose in Pliny, *Nat. Hist.* x. 51. Both stories are in Aelian, *De Natura Animal.* v. 29 (*cf.* i. 6; viii. 11); for Glauce see also Gow's note on Theocritus, iv. 31.

(972) βόητοι γάρ εἰσι καὶ πολλῶν οἶμαι διηγημάτων διακορεῖς ὑμᾶς εἶναι· διὸ ταῦτα μὲν ἀφίημι.

19. Ψᾶρες δὲ καὶ κόρακες καὶ ψιττακοὶ μανθάνοντες διαλέγεσθαι καὶ τὸ τῆς φωνῆς πνεῦμα τοῖς διδάσκουσιν εὔπλαστον οὕτω καὶ μιμηλὸν[1] ἐξαρ-
973 τύειν[2] καὶ ῥυθμίζειν παρέχοντες ἐμοὶ δοκοῦσι προδικεῖν καὶ συνηγορεῖν τοῖς ἄλλοις ζῴοις ἐν τῷ μανθάνειν, τρόπον τινὰ διδάσκοντες ἡμᾶς ὅτι καὶ προφορικοῦ λόγου καὶ φωνῆς ἐνάρθρου μέτεστιν αὐτοῖς· ᾗ[3] καὶ πολὺς κατάγελως τὸ πρὸς ταῦτα καταλιπεῖν ἐκείνοις σύγκρισιν, οἷς οὐδ' ὅσον ὠρύσασθαι μέτεστιν οὐδ' ὅσον στενάξαι φωνῆς. τούτων δὲ καὶ τοῖς αὐτοφυέσι καὶ τοῖς ἀδιδάκτοις γηρύμασιν ὅση μοῦσα καὶ χάρις ἔπεστιν, οἱ λογιώτατοι καὶ καλλιφωνότατοι μαρτυροῦσι, τὰ ἥδιστα ποιήματα καὶ μέλη κύκνων καὶ ἀηδόνων ᾠδαῖς ἀπεικάζοντες. ἐπεὶ δὲ τοῦ μαθεῖν τὸ διδάξαι λογικώτερον, ἤδη πειστέον Ἀριστοτέλει λέγοντι καὶ
B τοῦτο τὰ ζῷα ποιεῖν· ὀφθῆναι γὰρ ἀηδόνα νεοσσὸν ᾄδειν προδιδάσκουσαν. μαρτυρεῖ δ' αὐτῷ τὸ φαυλότερον ᾄδειν ὅσαις συμβέβηκε μικραῖς ἁλούσαις[4] ἀποτρόφοις τῶν μητέρων γενέσθαι· διδάσκονται γὰρ αἱ συντρεφόμεναι καὶ μανθάνουσιν οὐ διὰ μισθὸν οὐδὲ πρὸς δόξαν ἀλλὰ τῷ χαίρειν διαμελιζόμεναι καὶ τὸ καλὸν ἀγαπᾶν μᾶλλον ἢ τὸ χρειῶδες τῆς φωνῆς.

[1] μιμηλὸν ὂν Reiske.
[2] ἐξαρτύειν Reiske (*cf.* 973 D) : ἐξαριθμεῖν.
[3] ᾗ Wyttenbach : ἤ. [4] ἁλούσαις Xylander : ἀδούσαις.

[a] More in Aelian, *De Natura Animal.* xii. 37 ; *al.*
[b] *Cf.* Gellius, *Noctes Atticae*, xiii. 21. 25 ; Alciphron, *Epp.* iii. 30. 1 ; Philostratus, *Vita Apoll.* i. 7 ; vi. 36 : *al.*

player, since these are famous tales and I rather imagine you have had enough of such to spoil your appetite for more,[a] I omit them.

19. As for starlings [b] and crows and parrots which learn to talk and afford their teachers so malleable and imitative a vocal current to train and discipline, they seem to me to be champions and advocates of the other animals in their ability to learn, instructing us in some measure that they too are endowed both with rational utterance [c] and with articulate voice; for which reason it is quite ridiculous to admit a comparison of them with creatures who have not enough voice even to howl or groan.[d] And what music, what grace do we not find in the natural, untaught warbling of birds! To this the most eloquent and musical of our poets bear witness [e] when they compare their sweetest songs and poems to the singing of swans and nightingales. Now since there is more reason in teaching than in learning, we must yield assent to Aristotle [f] when he says that animals do teach: a nightingale, in fact, has been observed instructing her young how to sing. A further proof that supports him is the fact that birds which have been taken young from the nest and bred apart from their mothers sing the worse for it [g]; for the birds that are bred with their mothers are taught and learn, not for pay or glory, but for the joy of rivalling each other in song and because they cherish the beautiful in their utterance rather than the useful.

[c] For the λόγος προφορικός see, *e.g.*, *Mor.* 777 B-C.

[d] *Cf.* Aristotle, *Historia Animal.* iv. 9 (535 b 14 ff.).

[e] *e.g.*, Bacchylides, iii. 97: *Anth. Pal.* vii. 414.

[f] *Historia Animal.* iv. 19 (535 b 17); *cf.* ix. 1 (608 a 18); *cf.* Aelian, *De Natura Animal.* iii. 40.

[g] *Cf.* 992 B-C *infra.*

(973) Ἔχω δὲ περὶ τούτου καὶ λόγον εἰπεῖν πρὸς ὑμᾶς, ἀκούσας Ἑλλήνων τε πολλῶν καὶ Ῥωμαίων παραγενομένων. κουρεὺς γάρ τις ἐργαστήριον ἔχων ἐν Ῥώμῃ πρὸ τοῦ τεμένους, ὃ καλοῦσιν Ἑλλήνων C ἀγοράν, θαυμαστόν τι χρῆμα πολυφώνου καὶ πολυφθόγγου κίττης ἔτρεφεν, ἣ[1] καὶ ἀνθρώπου ῥήματα καὶ θηρίων φθόγγους καὶ ψόφους ὀργάνων ἀνταπεδίδου, μηδενὸς ἀναγκάζοντος ἀλλ' αὑτὴν ἐθίζουσα καὶ φιλοτιμουμένη μηδὲν ἄρρητον ἀπολιπεῖν μηδ' ἀμίμητον. ἔτυχε δέ τις ἐκεῖθεν τῶν πλουσίων ἐκκομιζόμενος ὑπὸ σάλπιγξι πολλαῖς, καὶ γενομένης ὥσπερ εἴωθε κατὰ τὸν τόπον ἐπιστάσεως, εὐδοκιμοῦντες οἱ σαλπιγκταὶ καὶ κελευόμενοι πολὺν χρόνον ἐνδιέτριψαν· ἡ δὲ κίττα μετὰ τὴν ἡμέραν ἐκείνην ἄφθογγος ἦν καὶ ἄναυδος, οὐδὲ τὴν αὑτῆς D ἐπὶ τοῖς ἀναγκαίοις πάθεσιν ἀφιεῖσα φωνήν. τοῖς οὖν πρότερον αὐτῆς θαυμάζουσι τὴν φωνὴν τότε θαῦμα μεῖζον ἡ σιωπὴ παρεῖχε, κωφὸν ἀκρόαμα τοῖς συνήθως[2] παροδεύουσι τὸν τόπον· ὑποψίαι δὲ φαρμάκων ἐπὶ τοὺς ὁμοτέχνους ἦσαν· οἱ δὲ πλεῖστοι τὰς σάλπιγγας εἴκαζον ἐκπλῆξαι τὴν ἀκοήν, τῇ δ' ἀκοῇ συγκατεσβέσθαι τὴν φωνήν. ἦν δ' οὐδέτερα τούτων, ἀλλ' ἄσκησις ὡς ἔοικε καὶ ἀναχώρησις εἰς ἑαυτὸ τοῦ μιμητικοῦ, καθάπερ ὄργανον ἐξαρτυομένου τὴν φωνὴν καὶ παρασκευάζοντος· ἄφνω γὰρ

[1] ἣ added by Bernardakis.
[2] ἀκροάματος συνήθους Reiske.

On this subject I have a story to tell you which I heard myself from many Greeks and Romans who were eye-witnesses. A certain barber at Rome had his shop directly opposite the precinct which they call the Market of the Greeks.[a] He bred up a wonderful prodigy of a jay [b] with a huge range of tones and expressions, which could reproduce the phrases of human speech and the cries of beasts and the sound of instruments—under no compulsion, but making it a rule and a point of honour to let nothing go unrepeated or unimitated. Now it happened that a certain rich man was buried from that quarter to the blast of many trumpets and, as is customary, there was a halt in front of the barber-shop while the trumpeters, who were applauded and encored, played for a long time. From that day on the jay was speechless and mute, not letting out even a peep to request the necessities of life; so those who habitually passed the place and had formerly wondered at her voice, were now even more astonished at her silence. Some suspected that she had been poisoned by rival bird-trainers, but most conjectured that the trumpets had blasted her hearing and that her voice had been simultaneously extinguished. Now neither of these guesses was correct: it was self-discipline, it would seem, and her talent for mimicry that had sought an inner retreat as she refitted and prepared her voice like a musical instrument. For suddenly her mimicry returned

[a] *Graecostadium* (see Platner and Ashby, *A Topographical Dictionary of Rome*, *s.v.*) or *Forum Graecorum*.

[b] *Cf.* Porphyry, *De Abstinentia*, iii. 2 (p. 191. 8, ed. Nauck): Gow on Theocritus, v. 136; Aristotle, *Historia Animal.* ix. 13 (615 b 19 f.). See also the talking birds in Pliny, *Nat. Hist.* x. 118-134.

(973) αὖθις ἧκε καὶ ἀνέλαμψεν οὐδὲν τῶν συνήθων καὶ
E παλαιῶν μιμημάτων ἐκείνων, ἀλλὰ τὰ μέλη τῶν σαλπίγγων αὐταῖς περιόδοις φθεγγομένη καὶ μεταβολὰς πάσας καὶ κρουμάτων διεξιοῦσα πάντας ῥυθμούς· ὥστε, ὅπερ ἔφην, τῆς εὐμαθείας λογικωτέραν εἶναι τὴν αὐτομάθειαν ἐν αὐτοῖς.

Πλὴν ἕν γέ τι μάθημα κυνὸς οὐ δοκῶ μοι παρήσειν, γενόμενος ἐν Ῥώμῃ θεατής. παρὼν γὰρ ὁ κύων μίμῳ πλοκὴν ἔχοντι δραματικὴν καὶ πολυπρόσωπον ἄλλας τε μιμήσεις ἀπεδίδου τοῖς ὑποκειμένοις πάθεσι καὶ πράγμασι προσφόρους, καὶ φαρμάκου ποιουμένων ἐν αὐτῷ πεῖραν ὑπνωτικοῦ μὲν ὑποκειμένου δ' εἶναι θανασίμου, τόν τ' ἄρτον, ᾧ δῆθεν ἐμέμικτο τὸ φάρμακον, ἐδέξατο καὶ κατα-
F φαγὼν ὀλίγον ὕστερον ὅμοιος ἦν ὑποτρέμοντι καὶ σφαλλομένῳ καὶ καρηβαροῦντι· τέλος δὲ προτείνας ἑαυτὸν ὥσπερ νεκρὸς ἔκειτο, καὶ παρεῖχεν ἕλκειν καὶ μεταφέρειν, ὡς ὁ τοῦ δράματος ὑπηγόρευε λόγος. ἐπεὶ δὲ τὸν καιρὸν ἐκ τῶν λεγομένων καὶ πραττομένων ἐνόησεν, ἡσυχῇ τὸ πρῶτον ἐκίνησεν ἑαυτόν, ὥσπερ ἐξ ὕπνου βαθέος ἀναφερόμενος, καὶ
974 τὴν κεφαλὴν ἐπάρας διέβλεψεν· ἔπειτα θαυμασάντων, ἐξαναστὰς ἐβάδιζε πρὸς ὃν ἔδει καὶ προσήκαλλε[1] χαίρων καὶ φιλοφρονούμενος, ὥστε πάντας ἀνθρώπους καὶ Καίσαρα (παρῆν γὰρ ὁ γέρων Οὐεσπασιανὸς ἐν τῷ Μαρκέλλου θεάτρῳ) συμπαθεῖς γενέσθαι.

[1] προσήκαλλε Wyttenbach : προσῆκε μὲν.

[a] This is also the accomplishment of a homonymous bird in Aelian, *De Natura Animal.* vi. 19.

[b] See 973 A *supra*.

and there blazed forth none of those old familiar imitations, but only the music of the trumpets,[a] reproduced with its exact sequences and every change of pitch and rhythm and tone. I conclude, as I said before,[b] that self-instruction implies more reason in animals than does readiness to learn from others.

Still, I believe that I should not pass over one example at least of a dog's learning,[c] of which I myself was a spectator at Rome. The dog appeared in a pantomime with a dramatic plot and many characters and conformed in its acting at all points with the acts and reactions required by the text. In particular, they experimented on it with a drug that was really soporific, but supposed in the story to be deadly. The dog took the bread that was supposedly drugged, swallowed it, and a little later appeared to shiver and stagger and nod until it finally sprawled out and lay there like a corpse, letting itself be dragged and hauled about, as the plot of the play prescribed. But when it recognized from the words and action that the time had come, at first it began to stir slightly, as though recovering from a profound sleep, and lifted its head and looked about. Then to the amazement of the spectators it got up and proceeded to the right person and fawned on him with joy and pleasure so that everyone, and even Caesar himself (for the aged Vespasian[d] was present in the Theatre of Marcellus), was much moved.

[c] *Cf.* the bears that acted a farce in *Script. Hist. Aug.*, *Vita Car.* xix. 2.

[d] Vespasian became emperor in A.D. 69 when he was 60 years old and died ten years later, so that this incident can be dated only within the decade.

(974) 20. Γελοῖοι δ' ἴσως ἐσμὲν ἐπὶ τῷ μανθάνειν τὰ ζῷα σεμνύνοντες, ὧν ὁ Δημόκριτος ἀποφαίνει μαθητὰς ἐν τοῖς μεγίστοις γεγονότας ἡμᾶς· ἀράχνης ἐν[1] ὑφαντικῇ καὶ ἀκεστικῇ, χελιδόνος ἐν οἰκοδομίᾳ, καὶ τῶν λιγυρῶν, κύκνου καὶ ἀηδόνος, ἐν ᾠδῇ κατὰ μίμησιν. ἰατρικῆς δὲ πολὺ τῶν τριῶν
B εἰδῶν ἑκάστου καὶ γενναῖον ἐν αὐτοῖς μόριον ὁρῶμεν· οὐ γὰρ μόνον τῷ φαρμακευτικῷ χρῶνται, χελῶναι μὲν ὀρίγανον γαλαῖ δὲ πήγανον, ὅταν ὄφεως φάγωσιν, ἐπεσθίουσαι· κύνες δὲ πόᾳ τινὶ καθαίροντες ἑαυτοὺς χολεριῶντας· ὁ δὲ δράκων τῷ μαράθρῳ τὸν ὀφθαλμὸν ἀμβλυώττοντα λεπτύνων καὶ διαχαράττων· ἡ δ' ἄρκτος, ὅταν ἐκ τοῦ φωλεοῦ προέλθῃ, τὸ ἄρον ἐσθίουσα πρῶτον τὸ ἄγριον· ἡ γὰρ δριμύτης ἀνοίγει συμπεφυκὸς[2] αὐτῆς τὸ ἔντερον· ἄλλως δ' ἀσώδης γενομένη πρὸς τὰς μυρμηκιὰς τρέπεται καὶ κάθηται προβάλλουσα λιπαρὰν καὶ μαλακὴν ἰκμάδι γλυκείᾳ τὴν γλῶσσαν, ἄχρις οὗ
C μυρμήκων ἀνάπλεως γένηται· καταπίνουσα γὰρ

[1] ἐν added by Xylander.
[2] συμμεμυκὸς Bernardakis.

[a] On this chapter see T. Weidlich, *Die Sympathie in Altertum*, p. 42.

[b] Diels-Kranz, *Frag. der Vorsok.* ii, p. 173, frag. 154; *cf.* Bailey on Lucretius, v. 1379 (vol. iii, p. 1540 of his edition); Aelian, *De Natura Animal.* xii. 16.

[c] *Cf.* 973 A *supra*.

[d] As given here, cure by (1) drugs, (2) diet, (3) surgery. There are five divisions in Diogenes Laertius, iii. 85: *al.*

[e] *Cf. Mor.* 918 C, 991 E; Aelian, *De Natura Animal.* vi. 12 and Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 24): of wounded partridges and storks and doves in Aelian, *op. cit.* v. 46 (Aristotle, *op. cit.* 612 a 32).

[f] Aristotle, *Historia Animal.* ix. 6 (612 a 28).

20.[a] Yet perhaps it is ridiculous for us to make a parade of animals distinguished for learning when Democritus [b] declares that we have been their pupils in matters of fundamental importance: of the spider in weaving and mending, of the swallow in home-building, of the sweet-voiced swan and nightingale [c] in our imitation of their song. Further, of the three divisions of medicine,[d] we can discern in animals a generous portion of each: for it is not cure by drugs alone of which they make use. After devouring a serpent tortoises [e] take a dessert of marjoram, and weasels [f] of rue. Dogs [g] purge themselves when bilious by a certain kind of grass. The snake [h] sharpens and restores its fading sight with fennel. When the she-bear comes forth from her lair,[i] the first thing she eats is wild arum [j]; for its acridity opens her gut which has become constricted. At other times, when she suffers from nausea,[k] she resorts to anthills and sits, holding out her tongue all running and juicy with sweet liquor until it is covered with ants; these she swallows [l] and is

[g] See Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 6); add Sextus Empiricus, *Outlines of Pyrrhonism*, i. 71.

[h] Pliny, *Nat. Hist.* xx. 254. Other details of snake diet in Aelian, *De Natura Animal.* vi. 4.

[i] As in 971 D-E *supra*.

[j] Probably the Adam-and-Eve (*Arum maculatum* L.), since the Italian arum (*Arum italicum* Mill.) was cultivated. See Aristotle, *Historia Animal.* viii. 17 (600 b 11); ix. 6 (611 b 34); Pliny, *Nat. Hist.* viii. 129; Aelian, *De Natura Animal.* vi. 3. Oribasius (*Coll. Med.* iii. 24. 5) characterizes wild arum as an aperient.

[k] When she has swallowed the fruit of the mandrake, according to Pliny, *Nat. Hist.* viii. 101.

[l] Aristotle, *Historia Animal.* viii. 4 (594 b 9); Aelian, *De Natura Animal.* vi. 3; Sextus Empiricus, *op. cit.* i. 57.

(974) ὠφελεῖται. τῆς τ' ἴβεως τὸν ὑποκλυσμὸν ἅλμῃ καθαιρομένης Αἰγύπτιοι συνιδεῖν καὶ μιμήσασθαι λέγουσιν· οἱ δ' ἱερεῖς ὕδατι χρῶνται, περιαγνίζοντες ἑαυτούς, ἐξ οὗ πέπωκεν ἶβις· ἂν γὰρ ᾖ φαρμακῶδες ἢ νοσηρὸν ἄλλως τὸ ὕδωρ, οὐ πρόσεισιν.

Ἀλλὰ καὶ τροφῆς ἀποσχέσει ἔνια θεραπεύεται,[1] καθάπερ λύκοι καὶ λέοντες, ὅταν κρεῶν γένωνται διακορεῖς, ἡσυχίαν ἄγουσι κατακείμενοι καὶ συνθάλποντες ἑαυτούς. τίγριν δέ φασιν, ἐρίφου παραδοθέντος αὐτῇ,[2] χρωμένην διαίτῃ μὴ φαγεῖν ἐφ' ἡμέρας δύο, τῇ δὲ τρίτῃ πεινῶσαν αἰτεῖν ἄλλο καὶ
D τὴν γαλεάγραν σπαράσσειν· ἐκείνου δὲ φείσασθαι οἰομένην σύντροφον ἔχειν ἤδη καὶ σύνοικον.

Οὐ μὴν ἀλλὰ καὶ χειρουργίᾳ χρῆσθαι τοὺς ἐλέφαντας ἱστοροῦσι· καὶ γὰρ ξυστὰ καὶ λόγχας καὶ τοξεύματα, παριστάμενοι τοῖς τετρωμένοις, ἄνευ σπαραγμοῦ ῥᾳδίως καὶ ἀβλαβῶς ἐξέλκουσιν. αἱ δὲ Κρητικαὶ αἶγες, ὅταν τὸ δίκταμνον φάγωσιν, ἐκβάλλουσαι τὰ τοξεύματα ῥᾳδίως καταμαθεῖν ταῖς ἐγκύοις τὴν βοτάνην παρέσχον ἐκτρωτικὴν δύναμιν ἔχουσαν· ἐπ' οὐδὲν γὰρ ἄλλο τρωθεῖσαι φέρονται καὶ ζητοῦσι καὶ διώκουσιν ἢ[3] τὸ δίκταμνον.

[1] θεραπεύεται Bernardakis: θεραπεύονται.
[2] A short lacuna is probable here.
[3] διώκουσιν ἢ Reiske: διώκουσι.

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[a] *Cf.* Aelian, *De Natura Animal.* ii. 35; vii. 45; Pliny, *Nat. Hist.* viii. 97; Cicero, *De Natura Deorum*, ii. 50.
[b] *Cf.* Aelian, *De Natura Animal.* iv. 15; see the hippopotamus in Amm. Marc. xx. 15. 23.
[c] Of a leopard in Aelian, *De Natura Animal.* vi. 2. This account seems to indicate a lacuna in our text explaining why

alleviated. The Egyptians [a] declare that they have observed and imitated the ibis' clyster-like purging of herself with brine; and the priests make use of water from which an ibis has drunk to purify themselves; for if the water is tainted or unhealthy in any way, the ibis will not approach it.

Then, too, some beasts cure themselves by a short fast, like wolves [b] and lions who, when they are surfeited with flesh, lie still for a while, basking in the sun. And they say a tigress, if a kid is given her, will keep fasting for two days without eating; on the third, she grows hungry and asks for some other food. She will even pull her cage to pieces, but will not touch the kid which she has now come to regard as a fellow-boarder and room mate.[c]

Yet again, they relate that elephants employ surgery: they do, in fact, bring aid to the wounded[d] by easily and harmlessly drawing out spears and javelins and arrows without any laceration of the flesh. And Cretan goats,[e] when they eat dittany,[f] easily expel arrows from their bodies and so have presented an easy lesson for women with child to take to heart, that the herb has an abortive property [g]; for there is nothing except dittany that the goats, when they are wounded, rush to search for.

the tigress did not eat the kid in the first place: "because she had already had enough to eat."

[d] For an example see the anecdote of Porus in 970 D *supra*, 977 B *infra*; Juba, frag. 52 (Jacoby); Aelian, *De Natura Animal.* vii. 45.

[e] *Cf.* 991 F *infra*; Philo, 38 (p. 119); Vergil, *Aen.* xii. 415; Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 3); Pease, *Mélanges Marouzeau*, 1948, p. 472.

[f] Cretan dittany (*Origanum dictamnus* L.): Pliny, *Nat. Hist.* xx. 156.

[g] *Cf.* Pease, *op. cit.* p. 471.

(974) 21. Ἧττον δὲ ταῦτα θαυμαστά, καίπερ ὄντα θαυμάσια, ποιοῦσιν αἱ νόησιν ἀριθμοῦ καὶ δύναμιν
E τοῦ ἀριθμεῖν ἔχουσαι φύσεις, ὥσπερ ἔχουσιν αἱ περὶ Σοῦσα βόες· εἰσὶ γὰρ αὐτόθι τὸν βασιλικὸν παράδεισον ἄρδουσαι περιάκτοις ἀντλήμασιν, ὧν ὥρισται τὸ πλῆθος· ἑκατὸν γὰρ ἑκάστη βοῦς ἀναφέρει καθ' ἡμέραν ἑκάστην ἀντλήματα· πλείονα δ' οὐκ ἔστιν οὔτε λαβεῖν[1] οὔτε βιάσασθαι βουλόμενον· ἀλλὰ καὶ πείρας ἕνεκα πολλάκις προστιθέντων, ὑφίσταται καὶ οὐ πρόεισιν, ἀποδοῦσα τὸ τεταγμένον· οὕτως ἀκριβῶς συντίθησι καὶ καταμνημονεύει τὸ κεφάλαιον, ὡς Κτησίας ὁ Κνίδιος ἱστόρηκε.

Λίβυες δ' Αἰγυπτίων καταγελῶσι μυθολογούντων
F περὶ τοῦ ὄρυγος, ὡς φωνὴν ἀφιέντος ἡμέρας ἐκείνης καὶ ὥρας ἧς ἐπιτέλλει τὸ ἄστρον, ὃ Σῶθιν αὐτοὶ Κύνα δὲ καὶ Σείριον ἡμεῖς καλοῦμεν· τὰς γοῦν[2] ὁμοῦ τι[3] πάσας αἶγας, ὅταν ἀνάσχῃ μεθ' ἡλίου τὸ ἄστρον ἀτρεκῶς, ἐκεῖ[4] στρεφομένας ἀποβλέπειν πρὸς τὴν ἀνατολήν· καὶ τεκμήριον τοῦτο τῆς περιόδου βεβαιότατον εἶναι καὶ μάλιστα τοῖς μαθηματικοῖς κανόσιν ὁμολογούμενον.

975 22. Ἵνα δὲ κορυφὴν ὁ λόγος ἐπιθεὶς ἑαυτῷ παύσηται, φέρε κινήσαντες τὴν ἀφ' ἱερᾶς βραχέα περὶ θειότητος αὐτῶν καὶ μαντικῆς εἴπωμεν. οὐ

[1] λαβεῖν] λαθεῖν Meziriacus.
[2] γοῦν W. C. H.: γὰρ αὐτῶν.
[3] τι added by Bernardakis.
[4] ἐκεῖ early editors: ἔχει.

[a] *Cf.* Aelian, *De Natura Animal.* iv. 53.
[b] Frag. 53b, ed. Gilmore (p. 196); *cf.* Aelian, *De Natura Animal.* vii. 1.

21. These matters, though wonderful, are less surprising than are those creatures which have cognition of number and can count,[a] as do the cattle near Susa. At that place they irrigate the royal park with water raised in buckets by wheels, and the number of bucketfuls is prescribed. For each cow raises one hundred bucketfuls each day, and more you could not get from her, even if you wanted to use force. In fact, they often try to add to the number to see; but the cow balks and will not continue when once she has delivered her quota, so accurately does she compute and remember the sum, as Ctesias[b] of Cnidus has related.

The Libyans laugh at the Egyptians for telling a fabulous tale about the oryx,[c] that it lets out a cry[d] at that very day and hour when the star rises that they call Sothis,[e] which we call the Dog Star or Sirius. At any rate, when this star rises flush with the sun, practically all the goats turn about and look toward the east; and this is the most certain sign of its return and agrees most exactly with the tables of mathematical calculation.[f]

22. But that my discourse may add its finishing touch and terminate, let me "make the move from the sacred line"[g] and say a few words about the divine inspiration and the mantic power of animals.

[c] See Mair on Oppian, *Cyn.* ii. 446.

[d] A sneeze, according to Pliny, *Nat. Hist.* ii. 107; Aelian, *De Natura Animal.* vii. 8.

[e] *Cf. Mor.* 359 D, 376 A.

[f] They watched for the first sight of Sirius before daybreak about June 20; the date shifted in the Egyptian calendar.

[g] See *Mor.* 783 B with Fowler's note; also 1116 E; Plato, *Laws*, 739 A; and Gow on Theocritus, vi. 18. The meaning is probably something like "let me play my last trump," or "commit my last reserve."

(975) γάρ τι μικρὸν οὐδ' ἄδοξον, ἀλλὰ πολὺ καὶ παμπάλαιον μαντικῆς μόριον οἰωνιστικὴ κέκληται· τὸ γὰρ ὀξὺ καὶ νοερὸν αὐτῶν καὶ δι' εὐστροφίαν ὑπήκοον ἁπάσης φαντασίας ὥσπερ ὀργάνῳ[1] τῷ θεῷ παρέχει χρῆσθαι καὶ τρέπειν ἐπί τε κίνησιν ἐπί τε φωνὰς καὶ γηρύματα καὶ σχήματα νῦν μὲν ἐνστατικὰ νῦν δὲ φορὰ καθάπερ πνεύματα τὰς[2] μὲν ἐπικόπτοντα τὰς δ' ἐπευθύνοντα πράξεις καὶ ὁρμὰς εἰς τὸ τέλος.
B διὸ κοινῇ μὲν ὁ Εὐριπίδης "θεῶν κήρυκας" ὀνομάζει τοὺς ὄρνιθας· ἰδίᾳ δέ φησιν ὁ Σωκράτης "ὁμόδουλον" ἑαυτὸν ποιεῖσθαι "τῶν κύκνων"· ὥσπερ αὖ καὶ τῶν βασιλέων ἀετὸς μὲν ὁ Πύρρος ἥδετο καλούμενος, ἱέραξ δ' ὁ Ἀντίοχος· ἰχθῦς δὲ τοὺς ἀμαθεῖς καὶ ἀνοήτους λοιδοροῦντες ἢ[3] σκώπτοντες ὀνομάζομεν. ἀλλὰ δὴ μυρίων μυριάκις εἰπεῖν παρόντων, ἃ προδείκνυσιν ἡμῖν καὶ προσημαίνει τὰ πεζὰ καὶ πτηνὰ παρὰ τῶν θεῶν, ἓν οὐκ ἔστι τοιοῦτον ἀποφῆναι τῷ προδικοῦντι τῶν ἐνύδρων, ἀλλὰ κωφὰ πάντα καὶ τυφλὰ τῆς προνοίας εἰς τὸν ἄθεον καὶ τιτανικὸν ἀπέρριπται τόπον[4] ὥσπερ ἀσεβῶν χῶρον, οὗ τὸ λογικὸν καὶ νοερὸν
C ἐγκατέσβεσται τῆς ψυχῆς, ἐσχάτῳ δέ τινι συμπε-

[1] ὄργανον Reiske.
[2] τὰς μὲν . . . τὰς δὲ Wyttenbach : ταῖς μὲν . . . ταῖς δὲ.
[3] ἢ] μᾶλλον ἢ Reiske.
[4] τόπον] πόντον W. C. H.

[a] Ornithoscopy or ornithomancy (*cf.* Leviticus xix. 26); Latin *augurium, auspicium*. See also Plato, *Phaedrus*, 244 D, *Phaedo*, 85 B.
[b] Perhaps *Ion*, 159; *cf.* also *Mor.* 405 D for the phrase.

It is, in fact, no small or ignoble division of divination, but a great and very ancient one, which takes its name from birds[a]; for their quickness of apprehension and their habit of responding to any manifestation, so easily are they diverted, serves as an instrument for the god, who directs their movements, their calls or cries, and their formations which are sometimes contrary, sometimes favouring, as winds are; so that he uses some birds to cut short, others to speed enterprises and inceptions to the destined end. It is for this reason that Euripides[b] calls birds in general "heralds of the gods"; and, in particular, Socrates[c] says that he considers himself a "fellow-slave of the swans." So again, among monarchs Pyrrhus[d] liked to be called an Eagle and Antiochus[e] a Hawk. But when we deride, or rail at, stupid and ignorant people we call them "fish." Really, we can produce cases by the thousand of signs and portents manifested to us by the gods through creatures of land and air, but not one such can the advocate for aquatic creatures name.[f] No, they are all "deaf and blind[g]" so far as foreseeing anything goes, and so have been cast aside into the godless and titanic[h] region, as into a Limbo of the Unblessed, where the rational and intelligent part of the soul has been extinguished. Having, however, only a last remnant

[c] Plato, *Phaedo*, 85 B.

[d] *Cf. Mor.* 184 D; *Life of Pyrrhus*, x. 1 (388 A-B); *Life of Aristides*, vi. 2 (322 A); Aelian, *De Natura Animal.* vii. 45.

[e] *Cf. Mor.* 184 A. This Antiochus was not, strictly speaking, a king, but the younger son of Antiochus II.

[f] This charge is answered in 976 C *infra*.

[g] *Cf.* the fragment of Epicharmus cited above in 961 A.

[h] *Cf.* Plato, *Laws*, 701 B-C (and Shorey, *What Plato Said*, p. 629); 942 A *supra* and Cherniss' note (*Class. Phil.* xlvi, 1951, p. 157, n. 95); see also 996 C *infra* with the note.

(975) φυρμένης καὶ κατακεκλυσμένης αἰσθήσεως μορίῳ, σπαίρουσι μᾶλλον ἢ ζῶσιν ἔοικεν.

23. ΗΡΑΚΛΕΩΝ. Ἄναγε τὰς ὀφρῦς, ὦ φίλε Φαίδιμε, καὶ διέγειρε σεαυτὸν ἡμῖν τοῖς ἐναλίοις καὶ νησιώταις· οὐ παιδιὰ τὸ χρῆμα τοῦ λόγου γέγονεν, ἀλλ' ἐρρωμένος ἀγὼν καὶ ῥητορεία κιγκλίδων ἐπιδέουσα καὶ βήματος.

ΦΑΙΔΙΜΟΣ. Ἐνέδρα μὲν οὖν, ὦ Ἡρακλέων, σὺν δόλῳ καταφανής· κραιπαλῶσι γὰρ ἔτι τὸ χθιζὸν καὶ βεβαπτισμένοις νήφων, ὡς ὁρᾷς, ὁ γενναῖος ἐκ παρασκευῆς ἐπιτέθειται. παραιτεῖσθαι δ' οὐκ ἔστιν· οὐ γὰρ βούλομαι Πινδάρου ζηλωτὴς ὢν ἀκοῦσαι τὸ

D τιθεμένων ἀγώνων πρόφασις
ἀρετὰν ἐς αἰπὺν ἔβαλε σκότον.

σχολὴ μὲν γὰρ πολλὴ πάρεστιν[1] ἡμῖν,[2] ἀργούντων οὐ λόγων[3] ἀλλὰ κυνῶν καὶ ἵππων καὶ δικτύου καὶ πάσης σαγήνης, διὰ τοὺς λόγους ἐκεχειρίας κοινῇ πᾶσι τοῖς ζῴοις κατά τε γῆν καὶ κατὰ θάλατταν δεδομένης τὸ σήμερον. ἀλλὰ μὴ φοβηθῆτε· χρήσομαι γὰρ αὐτῇ μετρίως, οὔτε δόξας φιλοσόφων οὔτ' Αἰγυπτίων μύθους οὔτ' ἀμαρτύρους Ἰνδῶν ἐπαγόμενος ἢ Λιβύων διηγήσεις· ἃ δὲ πανταχοῦ

[1] σχολὴ μὲν γὰρ πολλὴ πάρεστιν Bernardakis: σχολὴ μὲν οὖν πολλὴ γὰρ ἔστιν.
[2] ἡμῖν W. C. H.: ὑμῖν.
[3] λόγων Wyttenbach: χορῶν.

[a] That is, it is so realistic that one might imagine oneself in the lawcourts or the public assembly.

of sensation that is clogged with mud and deluged with water, they seem to be at their last gasp rather than alive.

23. HERACLEON. Raise your brows, dear Phaedimus, and rouse yourself to defend us the sea folk, the island-dwellers! This bout of argument has become no child's play, but a hard-fought contest, a debate which lacks only the actual bar and platform.[a]

PHAEDIMUS. Not so, Heracleon, but an ambush laid with malice aforethought has been disclosed. While we are still tipsy and soused from yesterday's bout, this gentleman, as you see, has attacked us with premeditation, cold sober. Yet there can be no begging off. Devotee of Pindar [b] though I am, I do not want to be addressed with the quotation

> To excuse oneself when combat is offered
> Has consigned valour to deep obscurity ;

for we have much leisure [c] ; and it is not our discourse that will be idle, but our dogs and horses, our nets and seines of all kinds, for a truce is granted for to-day because of our argument to every creature both on land and sea. Yet do not fear : I shall use it [d] with moderation, introducing no opinions of philosophers or Egyptian fables or unattested tales of Indians or Libyans. But those facts that may be observed

[b] Frag. 272, ed. Turyn (228 Schroeder, 215 Bowra) ; *cf. Mor.* 783 B ; Leutsch and Schneidewin, *Paroemiographi Graeci*, i, p. 44 ; Plato, *Cratylus*, 421 D.

[c] Perhaps merely a passing allusion to some such passage as Plato, *Phaedrus*, 258 E rather than, as Bernardakis thought, a quotation from an unknown tragic poet (Nauck, *Trag. Graec. Frag.* p. 869, Adesp. 138).

[d] Either " our leisure " or " the truce," *i.e.* the holiday Plutarch has given his pupils (see the Introduction to this essay).

(975) μάρτυρας ἔχει τοὺς ἐργαζομένους τὴν θάλατταν ὁρώμενα καὶ δίδωσι τῇ ὄψει πίστιν, τούτων ὀλίγα
E παραθήσομαι. καίτοι τῶν μὲν[1] ἐν γῇ παραδειγμάτων ἐπιπροσθοῦν οὐδέν ἐστιν, ἀλλ' ἀνεῳγμένη παρέχει τῇ αἰσθήσει τὴν ἱστορίαν· ἡ δὲ θάλασσα μικρὰ κατιδεῖν καὶ γλίσχρα δίδωσι, τῶν δὲ πλείστων κατακαλύπτει γενέσεις καὶ τροφὰς ἐπιθέσεις τε καὶ φυλακὰς ἀλλήλων, ἐν αἷς οὐκ ὀλίγα καὶ συνέσεως ἔργα καὶ μνήμης καὶ κοινωνίας ἀγνοούμενα βλάπτει τὸν λόγον. ἔπειτα τὰ μὲν ἐν γῇ διὰ τὴν ὁμοφυλίαν καὶ τὴν συνδιαίτησιν ἁμωσγέπως συναναχρωννύμενα τοῖς ἀνθρωπίνοις ἤθεσιν ἀπο-
F λαύει καὶ τροφῆς καὶ διδασκαλίας καὶ μιμήσεως· ᾗ τὸ μὲν πικρὸν ἅπαν καὶ σκυθρωπὸν ὥσπερ ἐπιμιξία ποτίμου θάλασσαν ἐφηδύνει, τὸ δὲ δυσξύνετον[2] ἅπαν καὶ νωθρὸν ἐπεγείρει ταῖς μετ' ἀνθρώπων κοινωνήσεσιν[3] ἀναρριπιζόμενον. ὁ δὲ τῶν ἐνάλων βίος ὅροις μεγάλοις τῆς πρὸς ἀνθρώπους ἀπῳκισμένος ὁμιλίας ἐπείσακτον οὐδὲν οὐδὲ συνειθισμένον
976 ἔχων ἴδιός ἐστι καὶ αὐθιγενὴς καὶ ἄκρατος ἀλλοτρίοις ἤθεσι διὰ τὸν τόπον, οὐ διὰ τὴν φύσιν. ἡ γὰρ φύσις ὅσον ἐξικνεῖται μαθήσεως ἐφ' αὑτὴν δεχομένη καὶ στέγουσα παρέχει πολλὰς μὲν ἐγχέλεις ἀνθρώποις χειροήθεις, ὥσπερ τὰς ἱερὰς λεγομένας[4] ἐν τῇ Ἀρεθούσῃ, πολλαχοῦ δ' ἰχθῦς ὑπακούοντας

[1] μὲν added by W. C. H.
[2] δυσξύνετον Reiske: δυσξύνθετον.
[3] κοινωνήσεσιν Emperius: κινήσεσιν.

everywhere and have as witnesses the men who exploit the sea and acquire their credit from direct observation, of these I shall present a few. Yet there is nothing to impede illustrations drawn from land animals : the land is wide open for investigation by the senses. The sea, on the other hand, grants us but a few dubious glimpses. She draws a veil over the birth and growth, the attacks and reciprocal defences, of most of her denizens. Among these there are no few feats of intelligence and memory and community spirit that remain unknown to us and so obstruct our argument. Then too, land animals [a] by reason of their close relationship and their cohabitation have to some extent been imbued with human manners ; they have the advantage of their breeding and teaching and imitation, which sweetens all their bitterness and sullenness, like fresh water mixed with brine, while their lack of understanding and dullness are roused to life by human contacts. Whereas the life of sea creatures, being set apart by mighty bounds from intercourse with men and having nothing adventitious or acquired from human usage, is peculiar to itself, indigenous, and uncontaminated by foreign ways, not by distinction of Nature, but of location. For their Nature is such as to welcome and retain such instruction as reaches them. This it is that renders many eels tractable, like those that are called sacred in Arethusa [b] ; and in many places there are fish which

[a] *Cf.* Pliny, *Nat. Hist.* ix. 1.
[b] *Cf.* Aelian, *De Natura Animal.* viii. 4.

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[4] ἱερὰς λεγομένας follows ἐγχέλεις in the MSS. ; transferred here by Kaltwasser.

(976) αὐτῶν ὀνόμασιν· ὥσπερ τὴν Κράσσου μύραιναν ἱστοροῦσιν, ἧς ἀποθανούσης ἔκλαυσεν ὁ Κράσσος· καί ποτε Δομετίου πρὸς αὐτὸν εἰπόντος, "οὐ σὺ μυραίνης ἀποθανούσης ἔκλαυσας;" ἀπήντησεν, "οὐ σὺ τρεῖς θάψας γυναῖκας οὐκ ἐδάκρυσας;"

Οἱ δὲ κροκόδειλοι τῶν ἱερέων οὐ μόνον γνωρί-B ζουσι τὴν φωνὴν καλούντων καὶ τὴν ψαῦσιν ὑπομένουσιν, ἀλλὰ καὶ διαχανόντες παρέχουσι τοὺς ὀδόντας ἐκκαθαίρειν ταῖς χερσὶ καὶ περιμάττειν ὀθονίοις. ἔναγχος δὲ Φιλῖνος ὁ βέλτιστος ἥκων πεπλανημένος ἐν Αἰγύπτῳ παρ' ἡμᾶς διηγεῖτο γραῦν ἰδεῖν ἐν Ἀνταίου πόλει κροκοδείλῳ συγκαθεύδουσαν ἐπὶ σκίμποδος εὖ μάλα κοσμίως παρεκτεταμένῳ.

Πάλαι δ' ἱστοροῦσι, Πτολεμαίου τοῦ βασιλέως παρακαλουμένου, τὸν ἱερὸν κροκόδειλον μὴ ἐπακούσαντα μηδὲ πεισθέντα λιπαροῦντι καὶ δεομένῳ[1] τοῖς ἱερεῦσι δόξαι προσημαίνειν τὴν μετ' οὐ πολὺ C συμβᾶσαν αὐτῷ τοῦ βίου τελευτήν· ὥστε μηδὲ τῆς πολυτιμήτου μαντικῆς ἄμοιρον εἶναι τὸ τῶν ἐνύδρων γένος μηδ' ἀγέραστον· ἐπεὶ καὶ περὶ Σοῦραν πυνθάνομαι, κώμην ἐν τῇ Λυκίᾳ Φέλλου μεταξὺ καὶ Μύρων, καθεζομένους ἐπ' ἰχθύσιν ὥσπερ οἰω-

[1] λιπαροῦντι καὶ δεομένῳ Reiske: λιπαροῦσι καὶ δεομένοις.

[a] *Cf.* Pliny, *Nat. Hist.* x. 193: Aelian, *De Natura Animal.* xii. 30.

[b] Not in the *Life of Crassus*, but derived from the same source as Aelian, *De Natura Animal.* viii. 4.; *cf.* the remarks in the *Life of Solon*, vii. 4 (82 A). The story is also recounted in *Mor.* 89 A, 811 A; Macrobius, *Sat.* iii. 15. 4; Porphyry,

will respond to their own names,[a] as the story goes of Crassus' [b] moray, upon the death of which he wept. And once when Domitius [c] said to him, "Isn't it true that you wept when a moray died?" he answered, "Isn't it true that you buried three wives and didn't weep?"

The priests' crocodiles [d] not only recognize the voice of those who summon them and allow themselves to be handled, but open their mouths to let their teeth be cleaned by hand and wiped with towels. Recently our excellent Philinus came back from a trip to Egypt and told us that he had seen in Antaeopolis an old woman sleeping on a low bed beside a crocodile, which was stretched out beside her in a perfectly decorous way.

They have long been telling the tale that when King Ptolemy [e] summoned the sacred crocodile and it would not heed him or obey in spite of his entreaties and requests, it seemed to the priests an omen of his death, which came about not long after; whence it appears that the race of water creatures is not wholly unendowed with your precious gift of divination.[f] Indeed, I have heard that near Sura,[g] a village in Lycia between Phellus and Myra, men sit and watch the gyrations and flights and pursuits of fish and

De Abstinentia, iii. 5. Hortensius, too, wept bitterly at the death of his pet moray (Pliny, *Nat. Hist.* ix. 172).

[c] L. Domitius Ahenobarbus, consul in 54 B.C., a bitter political opponent of Crassus and the Triumvirate.

[d] *Cf.* Aelian, *loc. cit.*

[e] Aelian, *loc. cit.*, does not know which Ptolemy is meant; *cf.* the story of Apis and Germanicus in Pliny, *Nat. Hist.* viii. 185; Amm. Marc. xxii. 14. 8.

[f] *Cf.* 975 B *supra*; Pliny, *Nat. Hist.* ix. 55.

[g] Aelian, *De Natura Animal.* viii. 5; Pliny, *Nat. Hist.* xxxii. 17.

(976) νοῖς διαμαντεύεσθαι τέχνῃ τινὶ καὶ λόγῳ ἑλίξεις[1] καὶ φυγὰς καὶ διώξεις αὐτῶν ἐπισκοποῦντας.

24. Ἀλλὰ ταῦτα μὲν ἔστω τοῦ μὴ παντάπασιν ἐκφύλου μηδ' ἀσυμπαθοῦς πρὸς ἡμᾶς ἱκανὰ δείγματα· τῆς δ' ἀκράτου καὶ φυσικῆς συνέσεως μέγα δήλωμα τὸ ὀκνηρόν[2] ἐστιν· οὐδὲν γὰρ οὕτως εὐχείρωτον ἀνθρώπῳ νηκτόν, ὃ[3] μὴ πέτραις προσέχεται
D καὶ προσπέφυκεν, οὐδ' ἁλώσιμον ἄνευ πραγματείας, ὡς λύκοις μὲν ὄνοι καὶ μέροψι μέλισσαι, χελιδόσι δὲ τέττιγες, ἐλάφοις δ' ὄφεις ἀγόμενοι ῥᾳδίως ὑπ' αὐτῶν· ᾗ καὶ τοὔνομα πεποίηται παρώνυμον οὐ τῆς ἐλαφρότητος ἀλλὰ τῆς ἕλξεως τοῦ ὄφεως. καὶ τὸ πρόβατον προσκαλεῖται τῷ ποδὶ τὸν λύκον, τῇ δὲ παρδάλει τὰ πλεῖστα προσχωρεῖν χαίροντα τῇ ὀσμῇ, μάλιστα δὲ τὸν πίθηκον λέγουσι. τῶν δὲ θαλαττίων ὁμοῦ τι πάντων ἡ προαίσθησις ὕποπτος οὖσα καὶ πεφυλαγμένη πρὸς τὰς ἐπιθέσεις ὑπὸ συνέσεως, οὐχ ἁπλοῦν τὸ τῆς ἄγρας ἔργον οὐδὲ φαῦλον ἀλλ'
E ὀργάνων τε παντοδαπῶν καὶ σοφισμάτων ἐπ' αὐτὰ δεινῶν καὶ ἀπατηλῶν δεόμενον ἀπείργασται.

Καὶ τοῦτο δῆλόν ἐστιν ἀπὸ τῶν πάνυ προχείρων. τὸν μὲν γὰρ ἀσπαλιευτικὸν κάλαμον οὐ βούλονται πάχος ἔχειν, καίπερ εὐτόνου δεόμενοι πρὸς τοὺς σπαραγμοὺς τῶν ἁλισκομένων, ἀλλὰ μᾶλλον ἐκλέγονται τὸν λεπτόν, ὅπως μὴ πλατεῖαν ἐπιβάλλων σκιὰν ἐκταράττῃ τὸ ὕποπτον αὐτῶν. ἔπειτα τὴν

[1] λόγῳ ἑλίξεις Bryan : λόγων λέξεις.
[2] ὀκνηρόν Post : κοινόν.
[3] ὃ Reiske : ἃ.

[a] A bird : Aristotle, *Historia Animal.* ix. 13 (615 b 25) ; Aelian, *De Natura Animal.* v. 11 ; Pliny, *Nat. Hist.* x. 99.
[b] Aelian, *De Natura Animal.* viii. 6 ; v. 48.
[c] *Elaphrotes.*

divine from them by a professional and rational system, as others do with birds.

24. But let these examples suffice to show that sea animals are not entirely unrelated to us or cut off from human fellowship. Of their uncontaminated and native intelligence their caution is strong evidence. For nothing that swims and does not merely stick or cling to rocks is easily taken or captured without trouble by man as are asses by wolves, bees by bee-eaters,[a] cicadas by swallows, and snakes by deer, which easily attract them.[b] This, in fact, is why deer are called *elaphoi*, not from their swiftness,[c] but from their power of attracting snakes.[d] So too the ram draws the wolf by stamping and they say that very many creatures, and particularly apes, are attracted to the panther by their pleasure in its scent.[e] But in practically all sea-creatures any sensation is suspect and evokes an intelligently inspired defensive reaction against attack, so that fishing has been rendered no simple or trivial task, but needs all manner of implements and clever and deceitful tricks to use against the fish.

This is perfectly clear from ready examples: no one wants to have an angler's rod too thick, though it needs elasticity to withstand the thrashing of such fish as are caught; men select, rather, a slender rod so that it may not cast a broad shadow and arouse suspicion.[f] In the next place, they do not thicken

[d] *Helxis opheos*, a fantastic etymology. Neither derivation is correct, *elaphos* being related to the Lithuanian *elnis*, "deer." For the references see Mair on Oppian, *Cyn.* ii. 234.

[e] See Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 13); add Aelian, *De Natura Animal.* viii. 6; v. 40.

[f] *Cf.* Gow on Theocritus, xxi. 10.

(976) ὁρμιὰν οὐ ποιοῦσι πολύπλοκον τοῖς ἅμμασι τῶν βρόχων οὐδὲ τραχεῖαν· ἐπεὶ καὶ τοῦτο τοῦ δόλου γίνεται τεκμήριον αὐτοῖς. καὶ τῶν τριχῶν τὰ καθήκοντα πρὸς τὸ ἄγκιστρον ὡς ἔνι μάλιστα λευκὰ φαίνεσθαι μηχανῶνται· μᾶλλον γὰρ οὕτως ἐν
F τῇ θαλάττῃ δι' ὁμοιότητα τῆς χρόας λανθάνουσι. τὸ δ' ὑπὸ τοῦ ποιητοῦ λεγόμενον

ἡ δὲ μολυβδαίνῃ ἰκέλη ἐς βυσσὸν ὄρουσεν,
ἥτε κατ' ἀγραύλοιο βοὸς κέρας ἐμβεβαυῖα
ἔρχεται ὠμηστῇσιν ἐπ' ἰχθύσι κῆρα φέρουσα·

παρακούοντες ἔνιοι βοείαις θριξὶν οἴονται πρὸς τὰς ὁρμιὰς χρῆσθαι τοὺς παλαιούς· " κέρας " γὰρ τὴν τρίχα λέγεσθαι καὶ τὸ κείρασθαι διὰ τοῦτο καὶ τὴν κουράν· καὶ τὸν παρ' Ἀρχιλόχῳ " κεροπλάστην "[1]
977 φιλόκοσμον εἶναι περὶ κόμην καὶ καλλωπιστήν. ἔστι δ' οὐκ ἀληθές· ἱππείαις γὰρ θριξὶ χρῶνται, τὰς τῶν ἀρρένων λαμβάνοντες· αἱ γὰρ θήλειαι τῷ οὔρῳ τὴν τρίχα βεβρεγμένην ἀδρανῆ ποιοῦσιν. Ἀρίσταρχος[2] δέ φησι μηδὲν ἐν τούτοις λέγεσθαι σοφὸν ἢ περιττὸν ἀλλὰ τῷ ὄντι κεράτιον περιτίθεσθαι πρὸ τοῦ ἀγκίστρου περὶ τὴν ὁρμιάν, ἐπεὶ[3] πρὸς ἄλλο

[1] κεροπλάστην Turnebus : κηροπλάστην.
[2] Ἀρίσταρχος Platt : Ἀριστοτέλης.
[3] ἐπεὶ Jannotius : ἔπειτα.

the line with many plies when they attach the loop and do not make it rough ; for this, too, betrays the lure to the fish. They also contrive that the hairs which form the leader shall be as white as possible ; for in this way they are less conspicuous in the sea because of the similarity of colour. The remark of the Poet [a] :

> Like lead she [b] sank into the great sea depths,
> Like lead infixed in horn of rustic ox
> Which brings destruction to the ravenous fish—

some misunderstand this and imagine that the ancients used ox-hair for their lines, alleging that *keras* [c] means " hair " and for this reason *keirasthai* means " to have one's hair cut " and *koura* is a " hair-cut " [d] and the *keroplastes* [e] in Archilochus [f] is one who is fond of trimming and beautifying the hair. But this is not so : they use horse-hair which they take from males, for mares by wetting the hair with their urine make it weak.[g] Aristarchus [h] declares that there is nothing erudite or subtle in these lines ; the fact is that a small piece of horn was attached to the line in front of the hook, since the fish, when they are confronted by anything else, chew the line

[a] Homer, *Iliad*, xxiv. 80-82.
[b] Iris going to visit Thetis.
[c] It means, of course, " horn " as above in Homer, *Iliad*, xxiv. 81.
[d] Or " lock of hair."
[e] " Horn-fashioner," so called from the horn-like bunching together of the hair : see the scholia on *Iliad*, xxiv. 81.
[f] Edmonds, *Elegy and Iambus*, ii, p. 126, frag. 57 ; Diehl, *Anth. Lyrica*, i, p. 228, frag. 59. See the note on 967 F *supra*.
[g] *Cf. Mor.* 915 F—916 A.
[h] Not Aristotle, as the MSS. read. See Platt, *Class. Quart.* v. 255.

(977) ἐρχόμενοι διεσθίουσι. τῶν δ' ἀγκίστρων τοῖς μὲν στρογγύλοις ἐπὶ κεστρέας καὶ ἀμίας χρῶνται μικροστόμους ὄντας· τὸ γὰρ εὐρύτερον[1] εὐλαβοῦνται· πολλάκις δὲ καὶ τὸ στρογγύλον ὁ κεστρεὺς ὑποπτεύων ἐν κύκλῳ περινήχεται, τῇ οὐρᾷ περιρ-
B ραπίζων τὸ ἐδώδιμον καὶ ἀνακάπτων[2] τὸ ἀποκρουόμενον[3]· ἂν δὲ μὴ δύνηται, συναγαγὼν[4] τὸ στόμα καὶ περιστείλας, τοῖς χείλεσιν ἄκροις ἐπιψαύων ἀποκνίζει τοῦ δελέατος.

Ὁ δὲ λάβραξ ἀνδρικώτερον τοῦ ἐλέφαντος οὐχ ἕτερον ἀλλ' αὐτὸς ἑαυτόν, ὅταν περιπέσῃ τῷ ἀγκίστρῳ, βελουλκεῖ, τῇ δεῦρο κἀκεῖ παραλλάξει τῆς κεφαλῆς ἀνευρύνων τὸ τραῦμα καὶ τὸν ἐκ τοῦ σπαραγμοῦ πόνον ὑπομένων, ἄχρις ἂν ἐκβάλῃ τὸ ἄγκιστρον. ἡ δ' ἀλώπηξ οὐ πολλάκις μὲν ἀγκίστρῳ πρόσεισιν ἀλλὰ φεύγει τὸν δόλον, ἁλοῦσα δ' εὐθὺς ἐκτρέπεται· πέφυκε γὰρ δι' εὐτονίαν καὶ ὑγρότητα μεταβάλλειν τὸ σῶμα καὶ στρέφειν, ὥστε τῶν
C ἐντὸς ἐκτὸς γενομένων ἀποπίπτειν τὸ ἄγκιστρον.

25. Ταῦτα μὲν οὖν γνῶσιν ἐμφαίνει καὶ χρῆσιν ἐπὶ καιρῷ τοῦ συμφέροντος εὐμήχανον καὶ περιττήν·

[1] εὐρύτερον Reiske : εὐθύτερον.
[2] ἀνακάπτων Grynaeus : ἀνακάμπτων.
[3] ἀποκρεμαννύμενον Reiske ; ἀποκρεμάμενον Bernardakis.
[4] συναγαγὼν Bernardakis : συνάγων.

[a] "The section of horn was put around the line. It was therefore a tube. It was in front of the hook as one held it in his hand and attached it to the line. It was therefore at the hook end of the leader. Its hardness prevented the line from being severed. Its neutral coloration prevented the fish from being frightened off. Note that Oppian (*Hal.* iii. 147) comments on the use of a hook with an abnormally long shank for the same purpose" (Andrews).

in two.[a] They use rounded hooks [b] to catch mullets and bonitos, whose mouths are small [c]; for they are wary of a broader hook. Often, indeed, the mullet suspects even a rounded hook and swims around it, flipping the bait with its tail and snatching up bits it has dislodged; or if it cannot do this, it closes its mouth and purses it up and with the tips of its lips nibbles away at the bait.[d]

The sea-bass is braver than your elephant [e]: it is not from another, but from himself without assistance, that he extracts the barb when he is caught by the hook; he swings his head from side to side to widen the wound, enduring the pain of tearing his flesh until he can throw off the hook.[f] The fox-shark [g] does not often approach the hook and shuns the lure; but if he is caught, he immediately turns himself inside out, for by reason of the elasticity and flexibility of his body he can naturally shift and twist it about, so that when he is inside out, the hook falls away.

25. Now the examples I have given indicate intelligence and an ingenious, subtle use of it for opportune

[b] A prototype of the Sobey hook.

[c] See Thompson on Aristotle, *Historia Animal.* ix. 37 (621 a 19): Mair on Oppian, *Hal.* iii. 144.

[d] *Cf.* Pliny, *Nat. Hist.* ix. 145; Oppian, *Hal.* iii. 524 ff.

[e] *Cf.* 974 D *supra*.

[f] *Cf.* Aelian, *De Natura Animal.* i. 40, of the tunny; Ovid, *Hal.* 39 f. and Oppian, *Hal.* iii. 128 ff., of the bass.

[g] Plutarch seems here to have confused this fish with the so-called *scolopendra* (of which he writes correctly in *Mor.* 567 B; see also Mair on Oppian, *Hal.* ii. 424). *Cf.* Aristotle, *Historia Animal.* ix. 37 (621 a 11); Aelian, *De Natura Animal.* ix. 12; *Varia Hist.* i. 5; Mair on Oppian, *Hal.* iii. 144; Pliny, *Nat. Hist.* ix. 145. "There are fish (but not sharks) which can disgorge their stomachs and swallow them again. Note that hasty reading of Aristotle *l.c.* could easily cause this misstatement" (Andrews).

(977) ἄλλα δ' ἐπιδείκνυται μετὰ τοῦ συνετοῦ τὸ κοινωνικὸν καὶ τὸ φιλάλληλον, ὥσπερ ἀνθίαι καὶ σκάροι. σκάρου μὲν γὰρ ἄγκιστρον καταπιόντος, οἱ παρόντες σκάροι προσαλλόμενοι τὴν ὁρμιὰν ἀποτρώγουσιν· οἱ αὐτοὶ[1] δὲ καὶ τοῖς εἰς κύρτον ἐμπεσοῦσι τὰς οὐρὰς παραδόντες ἔξωθεν ἕλκουσι δάκνοντας προθύμως καὶ συνεξάγουσιν. οἱ δ' ἀνθίαι τῷ συμφύλῳ βοηθοῦσιν ἰταμώτερον· τὴν γὰρ ὁρμιὰν ἀναθέμενοι κατὰ τὴν ῥάχιν καὶ στήσαντες ὀρθὴν τὴν
D ἄκανθαν ἐπιχειροῦσι διαπρίειν τῇ τραχύτητι καὶ διακόπτειν.

Καίτοι χερσαῖον οὐδὲν ἴσμεν ἑτέρῳ κινδυνεύοντι τολμῶν ἀμύνειν, οὐκ ἄρκτον οὐ σῦν οὐδὲ λέαιναν οὐδὲ πάρδαλιν· ἀλλὰ συγχωρεῖ μὲν εἰς ταὐτὸν ἐν τοῖς θεάτροις τὰ ὁμόφυλα καὶ κύκλῳ μετ' ἀλλήλων περίεισιν· ἑτέρῳ δ' ἕτερον οὐκ οἶδεν οὐδὲ φρονεῖ[2] βοηθεῖν, ἀλλὰ φεύγει καὶ ἀποπηδᾷ πορρωτάτω γινόμενα τοῦ τετρωμένου καὶ θνῄσκοντος. ἡ δὲ τῶν ἐλεφάντων ἱστορία φορυτὸν[3] εἰς τὰ ὀρύγματα φορούντων[4] καὶ τὸν ὀλισθόντα διὰ χώματος ἀναβι-

[1] οἱ αὐτοὶ Wyttenbach : οὗτοι.
[2] φρονεῖ] φροντίζει Bernardakis.
[3] φορυτὸν Meziriacus : φίλε τῶν.
[4] φορούντων] φορυτὸν συμφορούντων Reiske.

[a] The *anthias* of the above passage is probably the Mediterranean barbier, *Serranus anthias* C.V., although elsewhere it is sometimes obviously a much larger fish of uncertain identity. On the identification *cf.* Thompson on Aristotle, *Historia Animal.* vi. 17 (570 b 19) ; *Glossary of Greek Fishes*, *s.v.* ; Mair, introd. to his ed. of Oppian, pp. liii-lxi ; Marx, *RE*, i. 2375-2377 ; ii. 2415 ; Schmid, *Philologus*, Suppb. xi, 1907–1910, p. 273 ; Brands, *Grieksche*

profit ; but there are others that display, in combination with understanding, a social sense and mutual affection, as is the case with the barbier [a] and the parrot-fish. For if one parrot-fish swallows the hook, the others present swarm upon the line and nibble it away ; and the same fish, when any of their kind have fallen into the net, give them their tails from outside ; when they eagerly fix their teeth in these, the others pull on them and bring them through in tow.[b] And barbiers are even more strenuous in rescuing their fellows : getting under the line with their backs, they erect their sharp spines and try to saw the line through and cut it off with the rough edge.[c]

Yet we know of no land animal that has the courage to assist another in danger—not bear or boar or lioness or panther. True it is that in the arena those of the same kind draw close together and huddle in a circle ; yet they have neither knowledge nor desire to help each other. Instead, each one flees to get as far as possible from a wounded or dying fellow. That tale of the elephants [d] carrying brushwood to the pits and giving their fallen comrade a ramp to

Diernamen, pp. 147 f. ; Cotte, *Poissons et animaux aquatiques au temps de Pline*, pp. 69-73 ; Saint-Denis, *Le Vocabulaire des animaux marins en latin classique*, pp. 5-7. *Cf.* also 981 E *infra*.

[b] On this story *cf.* also Aelian, *De Natura Animal.* i. 4 ; Pliny, *Nat. Hist.* xxxii. 11 ; Ovid, *Hal.* 9 ff. ; Oppian, *Hal.* iv. 40 ff. Note also Aelian, *De Natura Animal.* v. 22, on mice.

[c] *Cf.* Pliny, *Nat. Hist.* ix. 182 ; xxxii. 13 ; Ovid, *Hal.* 45 ff. ; Oppian, *Hal.* iii. 321 ff.

[d] *Cf.* 972 B *supra* ; Jacoby, *Frag. der griech. Hist.* iii, p. 146, frag. 51 b. On the community spirit of elephants see also Aelian, *De Natura Animal.* v. 49 ; vi. 61 ; vii. 15 ; *al.*

(977) βαζόντων ἔκτοπός[1] ἐστι δεινῶς καὶ ἀλλοδαπή, καὶ καθάπερ ἐκ βασιλικοῦ διαγράμματος ἐπιτάττουσα
E πιστεύειν αὐτῇ τῶν Ἰόβα βιβλίων· ἀληθὴς δ' οὖσα πολλὰ δείκνυσι τῶν ἐνάλων μηδὲν ἀπολειπόμενα τῷ κοινωνικῷ καὶ συνετῷ τοῦ σοφωτάτου τῶν χερσαίων. ἀλλὰ περὶ κοινωνίας αὐτῶν ἴδιος ἔσται τάχα λόγος.

26. Οἱ δ' ἁλιεῖς συνορῶντες ὥσπερ ἀλεξήμασι[2] παλαισμάτων τὰ πλεῖστα διακρουόμενα τὰς ἀπ' ἀγκίστρου βολὰς ἐπὶ βίας ἐτράπησαν, καθάπερ οἱ Πέρσαι, σαγηνεύοντες ὡς τοῖς ἐνσχεθεῖσιν οὐδεμίαν ἐκ λογισμοῦ καὶ σοφίας διάφευξιν οὖσαν. ἀμφιβλήστροις μὲν γὰρ καὶ ὑποχαῖς κεστρεῖς καὶ ἰουλίδες ἁλίσκονται, μόρμυροί τε καὶ σαργοὶ καὶ
F κωβιοὶ καὶ λάβρακες· τὰ δὲ βολιστικὰ καλούμενα,

[1] ἔκτοπός] ψευδὴς μὲν οὖσα ἔκτοπός Reiske.
[2] ἀλεξήμασι Coraes: ἀδοξήμασι.

[a] Juba was king of Mauretania (25 B.C.–c. A.D. 23).
[b] *Cf.* Herodotus, vi. 31; iii. 149; Plato, *Laws* 698 D; Fraenkel on Aesch. *Agam.* 358. On kinds of nets see Mair, L.C.L. *Oppian*, pp. xl ff.
[c] *Coris iulis* Gth. *Cf.* Thompson on Aristotle, *Historia Animal.* ix. 3 (610 b 7); *A Glossary of Greek Fishes*, p. 91; Schmid, *op. cit.* p. 292; Brands, *op. cit.* p. 157; Cotte, *op. cit.* pp. 59-60; Saint-Denis, *op. cit.* p. 52.
[d] In particular, probably *Pagellus mormyrus* C.V. On the identification *cf.* Thompson on Aristotle, *Historia*

mount is monstrous and far-fetched and dictates, as it were, that we are to believe it on a king's prescription—that is, on the writs of Juba.[a] Suppose it to be true : it merely proves that many sea creatures are in no way inferior in community spirit and intelligence to the wisest of the land animals. As for their sociability, I shall soon make a special plea on that topic.

26. Now fishermen, observing that most fish evade the striking of the hook by such countermoves as wrestlers use, resorted, like the Persians,[b] to force and used the dragnet, since for those caught in it there could be no escape with the help of reason or cleverness. For mullet and rainbow-wrasse [c] are caught by casting-nets and round nets, as are also the bream [d] and the sargue [e] and the goby [f] and the sea-bass. The so-called net fish, that is surmullet [g]

Animal. vi. 7 (570 b 20) ; *Glossary*, p. 161 ; Cotte, *op. cit.* pp. 105-107 ; Saint-Denis, *op. cit.* pp. 65-66.

[e] In particular, probably *Sargus vulgaris* Geoff. On the identification *cf.* Thompson on Aristotle, *Historia Animal.* v. 9 (543 a 7) : *Glossary*, pp. 227-228 ; Cotte, *op. cit.* pp. 104-105 ; Saint-Denis, *op. cit.* pp. 99, 107-108 ; Keller, *Die antike Tierwelt*, ii, p. 370 ; Gossen-Steier, *RE*, Second Series, ii. 365.

[f] A term mostly for the black goby, *Gobius niger* L., the most common Mediterranean species. On the identification *cf.* Thompson on Aristotle, *Historia Animal.* viii. 13 (598 a 12) ; *Glossary*, pp. 137-139 ; Gossen, *RE*, Second Series, ii. 794-796.

[g] The red or plain surmullet, *Mullus barbatus* L., and the striped or common surmullet, *Mullus surmuletus* L. On this fish *cf.* Cotte, *op. cit.* pp. 98-101 ; Keller, *op. cit.* ii, pp. 364 f. ; Prechac, *Revue d. Ét. Lat.* xiv (1936), pp. 102-105 ; xvii (1939), p. 279 ; Saint-Denis, *op. cit.* pp. 68 f. ; Schmid, *op. cit.* pp. 310-312 ; Steier, *RE*, xvi. 496-503 ; Thompson, *Glossary*, pp. 264-268 ; Andrews, *Class. Weekly*, xlii (1949), pp. 186-188.

(977) τρίγλαν καὶ χρυσωπὸν καὶ σκορπίον, γρίποις τε καὶ σαγήναις σύρουσι περιλαμβάνοντες· τῶν δικτύων οὖν[1] τὸ γένος ὀρθῶς Ὅμηρος πανάγραν[2] προσεῖπεν. ἀλλὰ καὶ πρὸς ταῦτα μηχαναὶ ταῖς γαλαῖς εἰσιν[3] ὥσπερ τῷ λάβρακι· συρομένην γὰρ αἰσθανόμενος βίᾳ διίστησι καὶ τύπτει κοιλαίνων[4] τοὔδαφος· ὅταν δὲ ποιήσῃ τῆς ἐπιδρομῆς τοῦ δικτύου χώραν, ἐνέωσεν[5] ἑαυτὸν καὶ προσέχεται, μέχρις ἂν παρέλθῃ.

Δελφὶς δὲ περιληφθείς, ὅταν συναίσθηται γεγονὼς ἐν ἀγκάλαις σαγήνης, ὑπομένει μὴ ταραττόμενος ἀλλὰ χαίρων· εὐωχεῖται γὰρ ἄνευ πραγματείας ἀφθόνων ἰχθύων παρόντων· ὅταν δὲ πλησίον τῇ γῇ
978 προσίῃ, διαφαγὼν[6] τὸ δίκτυον ἄπεισιν. εἰ δὲ μὴ φθαίῃ φυγών,[7] τὸ πρῶτον οὐδὲν ἔπαθε δεινὸν ἀλλὰ διαρράψαντες αὐτοῦ περὶ τὸν λόφον ὁλοσχοίνους ἀφῆκαν· αὖθις δὲ ληφθέντα πληγαῖς κολάζουσι, γνωρίσαντες ἐκ τοῦ διαρράμματος. σπανίως δὲ τοῦτο συμβαίνει· συγγνώμης γὰρ τυγχάνοντες τὸ πρῶτον εὐγνωμονοῦσιν οἱ πλεῖστοι καὶ φυλάττονται τὸ λοιπὸν μὴ ἀδικεῖν.

Ἔτι δὲ πολλῶν τῶν πρὸς εὐλάβειαν καὶ προφυ-

[1] οὖν Bernardakis: ὤν.
[2] πάναγρον Hatzidakis and Platt (*cf. Iliad*, v. 487).
[3] γαλαῖς εἰσιν Bernardakis: γαλαῖσιν.
[4] τύπτων κοιλαίνει Reiske. [5] ἐνέωσεν Hubert: ἔωσεν.
[6] διαφαγὼν Reiske: φαγών.
[7] φυγών Pohlenz: διαφυγών.

[a] *Chrysophrys aurata* C.V., called gilthead from the golden band that runs from eye to eye. On this fish *cf.* Wellmann, *RE*, iii. 2517-2518; Keller, *op. cit.* ii, pp. 369 ff.; *RE*, vii. 1578; Schmid, *op. cit.* pp. 297-298; Thompson, *Glossary*, pp. 292-294; Cotte, *op. cit.* pp. 73-74; Saint-Denis, *op. cit.* pp. 80-81.

[b] *Scorpaena scrofa* L. and *S. porcus* L. On this fish *cf.*

and gilthead [a] and sculpin,[b] are caught in seines by trawling : accordingly it was quite correct for Homer [c] to call this kind of net a "catch-all." Codfish,[d] like bass,[e] have devices even against these. For when the bass perceives that the trawl is approaching, it forces the mud apart and hammers a hollow in the bottom. When it has made room enough to allow the net to overrun it, it thrusts itself in and waits until the danger is past.

Now when the dolphin is caught and perceives itself to be trapped in the net, it bides its time, not at all disturbed but well pleased, for it feasts without stint on the fish that have been gathered with no trouble to itself. But as soon as it comes near the shore, it bites its way through the net and makes its escape. Yet if it should not get away in time, on the first occasion it suffers no harm : the fishermen merely sew rushes to its crest and let it go. But if it is taken a second time, they recognize it from the seam and punish it with a beating. This, however, rarely occurs : most dolphins are grateful for their pardon in the first instance and take care to do no harm in the future.[f]

Further, among the many examples of wariness,

Cotte, *op. cit.* pp. 111-113 ; Saint-Denis, *op. cit.* pp. 103-104 ; Thompson on Aristotle, *Historia Animal.* v. 9 (543 a 7) ; *Glossary*, pp. 245 f.

[c] *Iliad*, v. 487 ; *cf.* Platt, *Class. Quart.* v, p. 255: Fraenkel, Aesch. *Agam.* ii, p. 190.

[d] Principally the hake and rockling, *Phycis* sp. and *Motella* sp. Not to be confused with γαλεός, a general term for sharks and dogfishes. *Cf.* Andrews, *Journal of the Washington Academy of Sciences*, xxxix (1949), pp. 1-16.

[e] *Cf.* Oppian, *Hal.* iii. 121 ff.

[f] On the alliance of dolphins and fisherman see Aelian, *De Natura Animal.* ii. 8 ; xi. 12 : Pliny, *Nat. Hist.* ix. 29 ff.

(978) λακὴν καὶ ἀπόδρασιν ὄντων παραδειγμάτων, οὐκ ἄξιόν ἐστι τὸ τῆς σηπίας παρελθεῖν. τὴν γὰρ καλουμένην μύτιν παρὰ τὸν τράχηλον ἔχουσα πλήρη ζοφερᾶς ὑγρότητος, ἣν θόλον καλοῦσιν, ὅταν κατα-
B λαμβάνηται, μεθίησιν ἔξω, τεχνωμένη τῆς θαλάττης διαθολωθείσης ποιήσασα περὶ αὑτὴν σκότος, ὑπεκδῦναι καὶ ἀποδρᾶναι τὴν τοῦ θηρεύοντος ὄψιν· ἀπομιμουμένη τοὺς Ὁμήρου θεοὺς "κυανέῃ νεφέλῃ" πολλάκις οὓς ἂν[1] σῶσαι θέλωσιν ὑφαιρουμένους καὶ διακλέπτοντας. ἀλλὰ τούτων μὲν ἅλις.

27. Τῆς δ' ἐπιχειρητικῆς καὶ θηρευτικῆς δεινότητος αὐτῶν ἐν πολλοῖς σοφίσματα κατιδεῖν ἔστιν. ὁ μὲν γὰρ ἀστήρ, ὧν ἂν ἅψηται, πάντα διαλυόμενα καὶ διατηκόμενα γινώσκων, ἐνδίδωσι τὸ σῶμα καὶ περιορᾷ ψαυόμενον ὑπὸ τῶν παρατρεχόντων ἢ προσπελαζόντων. τῆς δὲ νάρκης ἴστε δήπου τὴν δύναμιν, οὐ μόνον τοὺς θιγόντας αὐτῆς ἐκπηγνύουσαν,
C ἀλλὰ καὶ διὰ τῆς σαγήνης βαρύτητα ναρκώδη ταῖς χερσὶ τῶν ἀντιλαμβανομένων ἐμποιοῦσαν. ἔνιοι δ' ἱστοροῦσι, πεῖραν αὐτῆς ἐπὶ πλέον λαμβάνοντες, ἂν ἐκπέσῃ ζῶσα, κατασκεδαννύντες ὕδωρ ἄνωθεν, αἰσθάνεσθαι τοῦ πάθους ἀνατρέχοντος ἐπὶ τὴν χεῖρα καὶ τὴν ἀφὴν ἀμβλύνοντος ὡς ἔοικε διὰ τοῦ ὕδα-

[1] οὓς ἂν early editors: ὅταν.

[a] *Cf.* Aristotle, *Historia Animal.* ix. 37 (621 b 28); Athenaeus, 323 d-e; Pliny, *Nat. Hist.* ix. 84; Horace, *Sat.* i. 4. 100; Aelian, *De Natura Animal.* i. 34; Mair on Oppian, *Hal.* iii. 156.

[b] Aristotle, *Historia Animal.* iv. 1 (524 b 15); *De Part. Animal.* iv. 5 (679 a 1).

[c] "Under the mouth," says Aristotle.

precaution, or evasion, we must not pass over that of the cuttlefish [a]: it has the so-called *mytis* [b] beside the neck [c] full of black liquid, which they call "ink." [d] When it is come upon, it discharges the liquid to the purpose that the sea shall be inked out and create darkness around it while it slips through and eludes the fisherman's gaze. In this it imitates Homer's [e] gods who often "in a dark cloud" snatch up and smuggle away those whom they are pleased to save. But enough of this.

27. As for cleverness in attacking and catching prey, we may perceive subtle examples of it in many different species. The starfish,[f] for example, knowing that everything with which it comes in contact dissolves and liquefies, offers its body and is indifferent to the contact of those that overtake or meet it. You know, of course, the property of the torpedo [g]: not only does it paralyse all those who touch it, but even through the net creates a heavy numbness in the hands of the trawlers. And some who have experimented further with it report that if it is washed ashore alive and you pour water on it from above, you may perceive the numbness mounting to the hand and dulling your sense of touch by way of

[d] *Tholos*, "mud," "turbidity."

[e] For example, *Iliad*, v. 345.

[f] [Aristotle], *Historia Animal.* v. 15 (548 a 7 f.), an interpolated passage; nor can we be certain that it was known to Plutarch. See also Mair on Oppian, *Hal.* ii. 181.

[g] Or "electric ray" or "crampfish": for the ancient references see Thompson on Aristotle, *Historia Animal.* ix. 37 (620 b 12-23); *Glossary*, pp. 169-172; Aelian, *De Natura Animal.* i. 36; ix. 14; Pliny, *Nat. Hist.* ix. 143; Mair, L.C.L. *Oppian*, p. lxix, and on *Hal.* ii. 56; iii. 149; Philo, 30 (p. 115); Antigonus, *Hist. Mirab.* 48; Boulenger, *World Natural History*, pp. 189 f.

(978) τος τρεπομένου καὶ προπεπονθότος. ταύτης οὖν ἔχουσα σύμφυτον αἴσθησιν μάχεται μὲν ἐξ ἐναντίας πρὸς οὐδὲν οὐδὲ διακινδυνεύει· κύκλῳ δὲ περιιοῦσα τὸ θηρευόμενον ὥσπερ βέλη διασπείρει τὰς ἀπορροάς, φαρμάττουσα τὸ ὕδωρ πρῶτον, εἶτα τὸ ζῷον
D διὰ τοῦ ὕδατος, μήτ' ἀμύνασθαι δυνάμενον μήτε φυγεῖν ἀλλ' ἐνισχόμενον ὥσπερ ὑπὸ δεσμῶν καὶ πηγνύμενον.

Ὁ δὲ καλούμενος ἁλιεὺς γνώριμος μέν ἐστι πολλοῖς καὶ διὰ τοὔργον αὐτῷ γέγονε τοὔνομα· ᾧ σοφίσματι καὶ τὴν σηπίαν χρῆσθαί φησιν ὁ Ἀριστοτέλης· καθίησι γὰρ ὥσπερ ὁρμιὰν ἀπὸ τοῦ τραχήλου πλεκτάνην, μηκύνεσθαί τε πόρρω χαλώσης καὶ πάλιν συντρέχειν εἰς ἑαυτὴν ἀναλαμβανούσης ῥᾷστα πεφυκυῖαν. ὅταν οὖν τι τῶν μικρῶν ἰχθυδίων ἴδῃ πλησίον, ἐνδίδωσι δακεῖν καὶ κατὰ μικρὸν ἀναμηρύεται λανθάνουσα καὶ προσάγεται, μέχρις ἂν ἐν ἐφικτῷ τοῦ στόματος γένηται τὸ προσισχόμενον.[1]

E Τῶν δὲ πολυπόδων τῆς χρόας τὴν ἄμειψιν ὅ τε Πίνδαρος περιβόητον πεποίηκεν εἰπὼν

ποντίου θηρὸς χρωτὶ μάλιστα νόον
προσφέρων πάσαις πολίεσσιν ὁμίλει·

[1] προσισχόμενον Wyttenbach: προσχόμενον.

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[a] *Cf.* the "upward infection" of the basilisk, Pliny, *Nat. Hist.* viii. 78.

[b] The fishing-frog, *Lophius piscatorius* L.: Aristotle, *His-*

the water which, so it seems, suffers a change and is first infected.[a] Having, therefore, an innate sense of this power, it never makes a frontal attack or endangers itself; rather, it swims in a circle around its prey and discharges its shocks as if they were darts, thus poisoning first the water, then through the water the creature which can neither defend itself nor escape, being held fast as if by chains and frozen stiff.

The so-called fisherman [b] is known to many; he gets his name from his actions. Aristotle [c] says that the cuttlefish also makes use of this stratagem: he lets down, like a fishing line, a tentacle from his neck which is naturally designed to extend to a great length when it is released, or to be drawn to him when it is pulled in. So when he espies a little fish, he gives it the feeler to bite and then by degrees imperceptibly draws it back toward himself until the prey attached to the arm is within reach of his mouth.

As for the octopus' change of colour,[d] Pindar [e] has made it celebrated in the words

> To all the cities to which you resort
> Bring a mind like the changing skin of the seabeast;

toria Animal. ix. 37 (620 b 12); Pliny, *Nat. Hist.* ix. 144; Mair on Oppian, *Hal.* ii. 86; Strömberg, *Gr. Fischnamen*, pp. 122 f.

[c] *Historia Animal.* ix. 37 (622 a 1); *cf.* iv. 1 (524 a 3), iv. 6 (531 b 6); Pliny, *Nat. Hist.* ix. 83 ff.; Mair on Oppian, *Hal.* ii. 122.

[d] *Cf.* Aristotle, *Historia Animal.* ix. 37 (622 a 8); Mair on Oppian, *Hal.* ii. 233. Athenaeus, 316 f, 317 f, 513 d; Pliny, *Nat. Hist.* ix. 87; Antigonus, *Hist. Mirab.* 25, 50; Aelian, *Varia Hist.* i. 1; and Wellman, *Hermes*, li, p. 40.

[e] Frag. 43 Schroeder, 208 Turyn, 235 Bowra (p. 516, ed. Sandys L.C.L.); *cf. Mor.* 916 c and Turyn's references.

(978) καὶ Θέογνις ὁμοίως

πουλύποδος νόον ἴσχε πολυχρόου, ὃς ποτὶ πέτρῃ
τῇπερ ὁμιλήσῃ, τοῖος ἰδεῖν ἐφάνη.

μεταβάλλει μὲν γὰρ ὁ[1] χαμαιλέων οὐδέν τι μηχανώμενος οὐδὲ κατακρύπτων ἑαυτὸν ἀλλ' ὑπὸ δέους ἄλλως τρέπεται, φύσει ψοφοδεὴς ὢν καὶ δειλός. συνέπεται δὲ καὶ πνεύματος πλῆθος, ὡς Θεόφραστος· ὀλίγον γὰρ ἀποδεῖ πᾶν τὸ σῶμα τοῦ ζῴου πλῆρες
F εἶναι πνεύμονος, ᾧ τεκμαίρεται τὸ πνευματικὸν αὐτοῦ καὶ διὰ τοῦτο πρὸς τὰς μεταβολὰς εὔτρεπτον. τοῦ δὲ πολύποδος ἔργον ἐστὶν οὐ πάθος ἡ μεταβολή· μεταβάλλει γὰρ ἐκ προνοίας, μηχανῇ χρώμενος τοῦ λανθάνειν ἃ δέδιε καὶ λαμβάνειν οἷς τρέφεται· παρακρουόμενος γὰρ τὰ μὲν[2] αἱρεῖ μὴ φεύγοντα, τὰ δ' ἐκφεύγει παρερχόμενα. τὸ μὲν γὰρ αὐτοῦ τὰς πλεκτάνας κατεσθίειν αὐτὸν ψεῦδός ἐστιν· τὸ δὲ μύραιναν δεδιέναι καὶ γόγγρον ἀληθές ἐστιν· ὑπ' ἐκείνων γὰρ κακῶς πάσχει, δρᾶν μὴ δυνάμενος
979 ἐξολισθανόντων. ὥσπερ αὖ πάλιν ὁ κάραβος ἐκεί-

[1] μὲν γὰρ ὁ Reiske : γὰρ ὁ μὲν.
[2] τὰ μὲν added by Meziriacus.

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[a] 215-216 ; *cf. Mor.* 96 F, 916 C. There are many textual variants, but none alters the sense.

[b] Or
"Keep a mind as multicoloured as the octopus,
With the rock whereon it sits homologous"
(Andrews).

[c] See Thompson on Aristotle, *Historia Animal.* ii. 11 (503 b 2) ; Ogle on *De Part. Animal.* iv. 11 (692 a 22 ff.). See also Aelian, *De Natura Animal.* iv. 33 ; and *cf.* Pliny, *Nat. Hist.* viii. 122 for the chameleon's exclusive diet of "air" : nec alio quam aeris alimento.

and Theognis [a] likewise :

> Be minded like the octopus' hue :
> The colour of its rock will meet the view.[b]

The chameleon,[c] to be sure, is metachromatic, but not from any design or desire to conceal itself ; it changes colour uselessly from fear, being naturally timid and cowardly. And this is consistent with the abundance of air in it, as Theophrastus [d] says ; for nearly the whole body of the creature is occupied by its lungs,[e] which shows it to be full of air and for this reason easily moved to change colour. But this same action on the part of the octopus is not an emotional response, but a deliberate change, since it uses this device to escape what it fears and to capture what it feeds on : by this deceit it can both seize the latter, which does not try to escape, and avoid the former, which proceeds on its way. Now the story that it eats its own tentacles [f] is a lie, but it is true that it fears the moray and the conger. It is, in fact, maltreated by them ; for it cannot do them harm, since they slip from its grasp. On the other hand, when the crawfish [g] has once got them in its grasp,

[d] Frag. 189 Wimmer (p. 225) ; Aristotle says merely, " The change takes place when it is inflated by air."

[e] Which confirms Karsch's emendation of Aristotle, *Historia Animal.* ii. 11 (503 b 21) ; for Theophrastus and Plutarch must have had " lungs " and not " membranes " in their text of Aristotle.

[f] See 965 E *supra* and the note ; Pliny, *Nat. Hist.* ix. 87 ; *Mor.* 1059 E, 1098 E, *Comm. in Hes.* fr. 53 (Bernardakis, vol. VII, p. 77).

[g] The *langouste* as distinguished from the *homard* ; see Aelian, *De Natura Animal.* i. 32 ; ix. 25 ; x. 38 ; Thompson on Aristotle, *Historia Animal.* viii. 2 (590 b 16) ; *Glossary*, pp. 102 ff. ; Pliny, *Nat. Hist.* ix. 185 ; Antigonus, *Hist. Mirab.* 92.

(979) νων μὲν ἐν λαβαῖς γενομένων περιγίνεται ῥᾳδίως· ἡ γὰρ ψιλότης οὐ βοηθεῖ πρὸς τὴν τραχύτητα· τοῦ δὲ πολύποδος εἴσω τὰς πλεκτάνας διωθοῦντος ἀπόλλυται. καὶ τὸν κύκλον τοῦτον καὶ τὴν περίοδον ταῖς κατ' ἀλλήλων διώξεσι καὶ φυγαῖς γύμνασμα καὶ μελέτην ἡ φύσις αὐτοῖς ἐναγώνιον πεποίηκε δεινότητος καὶ συνέσεως.

28. Ἀλλὰ μὴν ἐχίνου γέ τινα χερσαίου[1] διηγήσατο πρόγνωσιν Ἀριστότιμος πνευμάτων, ὃς ἐθαύμαζε καὶ γεράνων τὴν ἐν τριγώνῳ πτῆσιν. ἐγὼ δ' ἐχῖνον μὲν οὐδένα Κυζικηνὸν ἢ Βυζάντιον, ἀλλὰ B πάντας ὁμοῦ παρέχομαι τοὺς θαλαττίους, ὅταν αἴσθωνται μέλλοντα χειμῶνα καὶ σάλον, ἑρματιζομένους λιθιδίοις, ὅπως μὴ περιτρέπωνται διὰ κουφότητα μηδ' ἀποσύρωνται γενομένου κλύδωνος, ἀλλ' ἐπιμένωσιν ἀραρότως τοῖς πετριδίοις.

Ἡ δ' αὖ[2] γεράνων μεταβολὴ τῆς πτήσεως πρὸς ἄνεμον οὐχ[3] ἑνὸς γένους ἐστίν, ἀλλὰ τοῦτο κοινῇ πάντες ἰχθύες νοοῦντες ἀεὶ πρὸς κῦμα καὶ ῥοῦν ἀντινήχονται καὶ παραφυλάττουσιν ὅπως μή, κατ' οὐρὰν προσφερομένου τοῦ πνεύματος, ἡ λεπὶς ἀναπτυσσομένη λυπῇ τὸ σῶμα γυμνούμενον καὶ διατραχυνόμενον· ὅθεν ἀεὶ συνέχουσιν ἑαυτοὺς C ἀντιπρῴρους· σχιζομένη γὰρ οὕτω κατὰ κορυφὴν ἡ

[1] χερσαίου] τοῦ χερσαίου Reiske.
[2] δ' αὖ W. C. H. : δὲ.
[3] οὐχ should perhaps be deleted ; or write οὐχ ἑνὸς μόνον.

[a] The octopus is worsted by the moray and the conger, which in turn are defeated by the crawfish, which (to complete the cycle) becomes the octopus' prey. The whole engagement is graphically portrayed in Oppian, *Hal.* ii. 253-418. For Nature's battle see, *e.g.*, Pliny, *Nat. Hist.* viii. 79.

[b] *Cf.* 972 A *supra.* Valentine Rose, curiously enough,

it wins the victory easily, for smoothness is no aid against roughness ; yet when the octopus has once thrust its tentacles inside the crawfish, the latter succumbs. And so Nature has created this cycle [a] and succession of mutual pursuit and flight as a field for the exercise and competitive practice of adroitness and intelligence.

28. We have, to be sure, heard Aristotimus [b] telling us about the hedgehog's foreknowledge of the winds ; and our friend also admired the V-shaped flight of cranes.[c] I can produce no hedgehog of Cyzicus or Byzantium,[d] but instead the whole body of sea-hedgehogs,[e] which, when they perceive that storm and surf are coming, ballast themselves with little stones [f] in order that they may not be capsized by reason of their lightness or be swept away by the swell, but may remain fixed in position through the weight of their little rocks.

Again, the cranes' change of flight against the wind [g] is not merely the action of one species : all fish generally have the same notion and always swim against wave and current, taking care that a blast from the rear does not fold back their scales and expose and roughen their bodies. For this reason they always present the prow of their bodies to the waves, for in that way head first they cleave the sea, which de-

emended to Aristotle (see *Historia Animal.* ix. 6, 612 b 4) and included this passage in Frag. 342. See further Mair on Oppian, *Hal.* ii. 226.

[c] *Cf.* 967 B *supra.*

[d] Perhaps he is learnedly confuting Aristotimus (972 A *supra*) by drawing on Aristotle.

[e] *i.e.* the sea-urchin, regarded by the ancients as a sort of marine counterpart of the hedgehog because of the similar spines.

[f] *Cf.* 967 B *supra*, of bees.

[g] *Cf.* 967 B *supra.*

(979) θάλασσα τά τε βράγχια καταστέλλει καὶ κατὰ τῆς ἐπιφανείας ῥέουσα λείως πιέζει καὶ οὐκ ἀνίστησι τὸ φρικῶδες. τοῦτο μὲν οὖν, ὥσπερ ἔφην, κοινόν ἐστι τῶν ἰχθύων, πλὴν τοῦ ἔλλοπος· τοῦτον δέ φασι[1] κατ' ἄνεμον καὶ ῥοῦν νήχεσθαι, μὴ φοβούμενον τὴν ἀναχάραξιν τῆς λεπίδος, ἅτε δὴ μὴ πρὸς οὐρὰν τὰς ἐπιπτυχὰς ἐχούσης.

29. Ὁ δὲ θύννος οὕτως ἰσημερίας αἰσθάνεται καὶ τροπῆς, ὥστε καὶ τὸν ἄνθρωπον διδάσκειν μηδὲν ἀστρολογικῶν κανόνων δεόμενος[2]· ὅπου γὰρ ἂν αὐτὸν χειμῶνος αἱ τροπαὶ καταλάβωσιν, ἀτρεμεῖ
D καὶ διατρίβει περὶ τὸν αὐτὸν τόπον ἄχρι τῆς ἰσημερίας. ἀλλὰ τῆς γεράνου σοφὸν ἡ τοῦ λίθου περίδραξις, ὅπως προϊεμένη νυκτὸς[3] ἐξυπνίζηται· καὶ πόσῳ σοφώτερον, ὦ φίλε, τὸ τοῦ δελφῖνος, ᾧ στῆναι μὲν οὐ θέμις οὐδὲ παύσασθαι φορᾶς· ἀεικίνητος γάρ ἐστιν ἡ φύσις αὐτοῦ καὶ ταὐτὸν ἔχουσα τοῦ ζῆν καὶ τοῦ κινεῖσθαι πέρας· ὅταν δ' ὕπνου δέηται, μετεωρίσας ἄνω τὸ σῶμα πρὸς τὴν ἐπιφάνειαν τῆς θαλάττης, ὕπτιον ἀφῆκε διὰ βάθους, αἰώρας τινὶ σάλῳ κοιμιζόμενος[4] ἄχρι προσπεσεῖν καὶ ψαῦσαι τῆς γῆς· οὕτω δ' ἐξυπνισθεὶς ἀναρροιζεῖ καὶ πάλιν ἄνω γενόμενος ἐνδίδωσι, καὶ φέρεται κινήσει τινὰ
E μεμιγμένην ἀνάπαυσιν αὑτῷ μηχανώμενος. τὸ δ'

[1] φασι early editors : φύσει.
[2] δεόμενος Hubert : δεόμενον.
[3] νυκτὸς Kronenberg : πυκνὸν (πρὸς τὸν κτύπον Reiske).
[4] κοιμιζόμενος Reiske : κομιζόμενος.

[a] Probably usually the common sturgeon, *Acipenser sturio*: see Thompson, *Glossary*, pp. 62 f.: Aelian, *De Natura Animal.* viii. 28, speaks of it as a rare and sacred

presses their gills and, flowing smoothly over the surface, keeps down, instead of ruffling up, the bristling skin. Now this, as I have said, is common to all fish except the sturgeon,[a] which, they say, swims with wind and tide and does not fear the harrowing of its scales since the overlaps are not in the direction of the tail.

29. The tunny[b] is so sensitive to equinox and solstice that it teaches even men themselves without the need of astronomical tables; for wherever it may be when the winter solstice overtakes it, in that same place it stands and stays until the equinox. As for that clever device of the crane,[c] the grasping of the stone by night so that if it falls, she may awake from sleep—how much cleverer, my friend, is the artifice of the dolphin, for whom it is illicit to stand still or to cease from motion.[d] For its nature is to be ever active[e]: the termination of its life and its movement is one and the same. When it needs sleep, it rises to the surface of the sea and allows itself to sink deeper and deeper on its back, lulled to rest by the swinging motion of the ground swell[f] until it touches the bottom. Thus roused, it goes whizzing up, and when it reaches the surface, again goes slack, devising for itself a kind of rest combined

fish; see 981 D *infra*. *Cf.* Milton's "Ellops drear" (*P.L.* x. 525).

[b] *Cf.* Aelian, *De Natura Animal.* ix. 42; Aristotle, *Historia Animal.* viii. 13 (598 b 25 f.).

[c] See 967 C *supra*.

[d] Reiske may have been right in suspecting a trimeter of unknown origin in these words.

[e] *Cf.* Aelian, *De Natura Animal.* xi. 22. The dolphin even nurses its young while in motion: Pliny, *Nat. Hist.* xi. 235; and *cf.* Aristotle, *Historia Animal.* ii. 13 (504 b 21 ff.).

[f] As it were, the cradle of the deep.

(979) αὐτὸ δρᾶν καὶ θύννους ἀπὸ τῆς αὐτῆς αἰτίας λέγουσιν.

Ἐπεὶ δ' ἄρτι τὴν μαθηματικὴν αὐτῶν[1] τῆς τοῦ ἡλίου μεταβολῆς ἐτέλεσα[2] πρόγνωσιν, ἧς μάρτυς Ἀριστοτέλης ἐστίν, ἄκουσον ἤδη τὴν ἀριθμητικὴν ἐπιστήμην αὐτῶν· πρότερον δέ, ναὶ μὰ Δία, τὴν ὀπτικήν, ἣν ἔοικε μηδ' Αἰσχύλος ἀγνοῆσαι· λέγει γάρ που

τὸ[3] σκαιὸν ὄμμα παραβαλὼν θύννου δίκην.

τῷ γὰρ ἑτέρῳ δοκοῦσιν ἀμβλυώττειν· ὅθεν ἐμβάλλουσιν εἰς τὸν Πόντον ἐν δεξιᾷ τῆς γῆς ἐχόμενοι, καὶ τοὐναντίον ὅταν ἐξίωσιν· ἐμφρόνως πάνυ καὶ νουνεχῶς ἀεὶ τὴν τοῦ σώματος φυλακὴν ἐπὶ τῷ κρείττονι ποιούμενοι τῶν ὀφθαλμῶν. ἀριθμητικῆς
F δὲ διὰ τὴν κοινωνικήν, ὡς ἔοικε, καὶ φιλάλληλον ἀγάπησιν ἑαυτῶν δεηθέντες οὕτως ἐπ' ἄκρον ἥκουσι τοῦ μαθήματος, ὥστ', ἐπεὶ πάνυ χαίρουσι τῷ συντρέφεσθαι καὶ συναγελάζεσθαι μετ' ἀλλήλων, ἀεὶ τὸ πλῆθος τῷ σχήματι κυβίζουσι καὶ στερεὸν ἐκ πάντων ποιοῦσιν, ἓξ ἴσοις ἐπιπέδοις περιεχόμενον· εἶτα νήχονται τὴν[4] τάξιν οὕτω τὸ πλαίσιον ἀμφίστομον[5]

[1] αὐτῶν Reiske : οὕτως.
[2] ἐτέλεσα] ἐπελήλυθα Reiske.
[3] που τὸ Meziriacus : τοῦτο.
[4] τὴν] κατὰ Reiske.
[5] ἀμφίστοιχον Wyttenbach.

with motion.[a] And they say that tunnies do the same thing for the same reason.

Having just a moment ago given you an account of the tunny's mathematical foreknowledge of the reversal of the sun, of which Aristotle [b] is a witness, I beg you to hear the tale of their arithmetical learning. But first, I swear, I must mention their knowledge of optics, of which Aeschylus [c] seems not to have been ignorant, for these are his words :

Squinting the left eye like a tunny fish.

They seem, indeed, to have poor sight in one eye. And it is for this reason that when they enter the Black Sea, they hug[f] one bank on the right, and the other [d] when they are going out, it being very prudent and sagacious of them always to entrust the protection of themselves to the better eye. Now since they apparently need arithmetic to preserve their consociation and affection for each other, they have attained such perfection of learning that, since they take great pleasure in feeding and schooling together,[e] they always form the school into a cube, making it an altogether solid figure with a surface of six equal plane sides ; then they swim on their way preserving their formation, a square that faces

[a] But see Pliny, *Nat. Hist.* x. 210, where it is reported that dolphins " are actually heard snoring."

[b] *Historia Animal.* viii. 13 (598 b 25).

[c] Nauck, *Trag. Graec. Frag.* p. 96, frag. 308 ; *cf.* Aelian, *De Natura Animal.* ix. 42.

[d] See Thompson on Aristotle, *Historia Animal.* viii. 13 (598 b 19 ff.) ; *Glossary*, p. 84 ; Pliny, *Nat. Hist.* ix. 50. They follow the opposite shore when returning, thus keeping the same eye towards the land.

[e] *Cf.* Aristotle, *Historia Animal.* ix. 2 (610 b 1 f.) : Aelian, *De Natura Animal.* xv. 3, 5.

980 διαφυλάττοντες. ὁ γοῦν θυννοσκόπος, ἂν ἀκριβῶς λάβῃ τὸν ἀριθμὸν τῆς ἐπιφανείας, εὐθὺς ἀποφαίνεται πόσον καὶ ἅπαν τὸ πλῆθός ἐστιν, εἰδὼς ὅτι καὶ τὸ βάθος αὐτῶν ἐν ἴσῳ τεταγμένον στοιχείῳ πρός τε τὸ πλάτος ἐστὶ καὶ τὸ μῆκος.

30. Ἀμίαις δὲ καὶ τοὔνομα παρέσχηκεν ὁ συναγελασμός, οἶμαι δὲ καὶ ταῖς πηλαμύσι. τῶν δ' ἄλλων γενῶν ὅσα φαίνεται καὶ ζῇ κοινωνικῶς μετ' ἀλλήλων ἀγεληδὸν οὐκ ἄν τις εἴποι τὸν ἀριθμόν, ἀλλὰ μᾶλλον ἐπὶ τὰς κατ' ἰδίαν κοινωνίας αὐτῶν καὶ συμβιώσεις ἰτέον. ὧν ἐστι καὶ ὁ τὸ πλεῖστον ἐξαναλώσας Χρυσίππου μέλαν πιννοτήρας,[1] ἐν παντὶ[2]
B καὶ φυσικῷ βιβλίῳ καὶ ἠθικῷ προεδρίαν ἔχων· τὸν γὰρ σπογγοτήραν οὐκ ἱστόρηκεν, οὐ γὰρ ἂν παρέλιπεν. ὁ μὲν οὖν πιννοτήρας ζῷόν ἐστι καρκινῶδες, ὥς φασι, καὶ τῇ πίννῃ σύνεστι καὶ πυλωρεῖ τὴν

[1] πιννοτήρας Wyttenbach : πινοθήρας.
[2] ἐν παντὶ] ἐν added by Wyttenbach.

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[a] A watcher posted on a tall mast to warn fishermen of the approach of a shoal and to give a count. See Thompson on Aristotle, *Historia Animal.* iv. 10 (537 a 19); *Glossary*, p. 87; Gow on Theocritus, iii. 26; Mair on Oppian, *Hal.* iii. 638. Accounts of the ancient tunny fishery are given by Thompson, *Glossary*, pp. 84-88; Pace, *Atti R. Ac. Archeologia Napoli*, N.S. xii (1931/2), pp. 326 ff.; and Rhode, *Jahrb. f. class. Phil.*, Suppb. xviii (1900), pp. 1-78. An account of the ancient and the modern tunny fishery is given by Parona, *R. Comitato Talasso-grafico Italiano, Memoria*, no. 68, 1919.

[b] Similarly, Athenaeus (vii. 278 a; *cf.* 324 d) quotes Aristotle as defining *amia* as "not solitary," *i.e.* running in schools. Actually the term is probably foreign, perhaps of Egyptian origin (*cf.* Thompson, *Glossary*, p. 13).

[c] Plutarch takes *pēlamys* to be compound of *pelein* "to be" and *hama* "with," with reference to their running in

both ways. Certainly a hooer[a] watching for tunnies who counts the exact number on the surface at once makes known the total number of the shoal, since he knows that the depth is equal one to one with the breadth and the length.

30. Schooling together has also given the bonitos their name of *amia*[b] and I think this is true of year-old tunnies as well.[c] As for the other kinds which are observed to live in shoals in mutual society, it is impossible to state their number. Let us rather, therefore, proceed to examine those that have a special partnership, that is, symbiosis. One of these is the pinna-guard,[d] over which Chrysippus[e] spilled a very great deal of ink; indeed it has a reserved seat in every single book of his, whether ethical or physical.[f] Chrysippus has obviously not investigated the sponge-guard[g]; otherwise he could hardly have left it out. Now the pinna-guard is a crab-like creature, so they say, who lives with the pinna[h] and

schools. It was also anciently presumed to be a compound of *pēlos* "mud" and *myein* "be shut in or enclosed," because of its habit of hiding in the mud (*cf.* Aristotle, *Historia Animal.* 599 b 18; Pliny, *Nat. Hist.* ix. 47). Most scholars now regard it as a loan from the Mediterranean substratum, although Thompson (*Glossary*, p. 198) suggests that it may be of Asiatic origin, since it was used especially of the tunny in the Black Sea.

[d] See Thompson, *Glossary*, p. 202.

[e] Von Arnim, *S.V.F.* ii, p. 208, frag. 729 b (Athenaeus, 89 d). *Cf.* also fragments 729, 729 a, and 730. On the place of the pinna in Chrysippus' theology see A. S. Pease, *Harv. Theol. Rev.* xxxiv (1941), p. 177.

[f] *Cf. Mor.* 1035 B, 1038 B.

[g] A little crab that lives in the hollow chambers of a sponge. See Thompson, *loc. cit.*

[h] On this bivalve shellfish see Thompson, *Glossary*, p. 200; Mair on Oppian, *Hal.* ii. 186.

(980) κόγχην προκαθήμενος, ἐῶν ἀνεῳγμένην καὶ διακεχηνυῖαν, ἄχρις οὗ προσπέσῃ τι τῶν ἁλωσίμων αὐτοῖς ἰχθυδίων· τότε δὲ τὴν σάρκα τῆς πίννης δακὼν παρεισῆλθεν, ἡ δὲ συνέκλεισε τὴν κόγχην, καὶ κοινῶς τὴν ἄγραν ἐντὸς ἕρκους γενομένην κατεσθίουσι.

Τὸν δὲ σπόγγον ἡνιοχεῖ θηρίδιον οὐ καρκινῶδες ἀλλ' ἀράχνῃ παραπλήσιον· οὐ γὰρ ἄψυχον οὐδ' ἀναίσθητον οὐδ' ἄναιμον ὁ σπόγγος ἐστὶν ἀλλὰ ταῖς
C μὲν πέτραις, ὡς ἄλλα πολλά, προσπέφυκεν, ἔχει δὲ κίνησιν ἰδίαν ἐξ ἑαυτοῦ καὶ εἰς ἑαυτόν, οἷον ὑπομνήσεως καὶ παιδαγωγίας δεομένην· μανὸς γὰρ ὢν ἄλλως καὶ τοῖς ἀραιώμασιν ἀνειμένος ὑπ' ἀργίας καὶ ἀμβλύτητος, ὅταν ἐμβῇ τι τῶν ἐδωδίμων, ἐκείνου σημήναντος, ἔμυσε καὶ κατηνάλωσεν· ἔτι δὲ μᾶλλον, ἀνθρώπου προσιόντος ἢ θιγόντος, διδασκόμενος καὶ χαρασσόμενος οἷον ἔφριξε καὶ συνέκλεισε τὸ σῶμα πήξας καὶ πυκνώσας, ὥστε μὴ ῥᾳδίαν ἀλλὰ δύσεργον εἶναι τὴν ὑποτομὴν[1] αὐτοῦ τοῖς θηρεύουσιν.

Αἱ δὲ πορφύραι συναγελαζόμεναι τὸ μὲν κηρίον, ὥσπερ αἱ μέλιτται, κοινῇ ποιοῦσιν, ἐν ᾧ λέγονται
D γονεύειν· τὰ δ' ἐδώδιμα τῶν βρύων καὶ τῶν φυκίων ἀναλαμβάνουσαι προσισχόμενα[2] τοῖς ὀστράκοις οἷον ἐν περιόδῳ κυκλουμένην ἑστίασιν ἀλλήλαις παρέχουσιν, ἑτέραν ἑτέρας ἑξῆς[3] ἐπινεμομένης.

31. Καὶ τί ἄν τις ἐν τούτοις τὴν κοινωνίαν

[1] ἀποτομὴν Meziriacus.
[2] προσισχόμενα Reiske : προϊσχόμενα.
[3] ἑξῆς Post : ἔξωθεν.

[a] Nevertheless, it is a crab, *Typton spongicola*.
[b] *Cf.* Aelian, *De Natura Animal.* viii. 16 ; Aristotle,

sits in front of the shell guarding the entrance. It allows the pinna to remain wide open and agape until one of the little fish that are their prey gets within; then the guard nips the flesh of the pinna and slips inside; the shell is closed and together they feast on the imprisoned prey.

The sponge is governed by a little creature not resembling a crab, but much like a spider.[a] Now the sponge [b] is no lifeless, insensitive, bloodless thing; though it clings to the rocks,[c] as many other animals do, it has a peculiar movement outward and inward which needs, as it were, admonition and supervision. In any case it is loose in texture and its pores are relaxed because of its sloth and dullness; but when anything edible enters, the guard gives the signal, and it closes up and consumes the prey. Even more, if a man approaches or touches it, informed by the scratching of the guard, it shudders, as it were, and so closes itself up by stiffening and contracting that it is not an easy, but a very difficult, matter for the hunters to undercut it.

The purplefish [d] lives in colonies which build up a comb together, like bees. In this the species is said to propagate; they catch at edible bits of oyster-green and seaweed that stick to shells, and furnish each other with a sort of periodic rotating banquet, as they feed one after another in series.

31. And why should anyone be surprised at the

Historia Animal. v. 16 (548 a 28 ff.); Pliny, *Nat. Hist.* ix. 148; Antigonus, 83; Mair on Oppian, *Hal.* v. 656; Thompson, *Glossary*, pp. 249-250.

[c] *Cf.* W. Jaeger, *Nemesios von Emesa*, p. 116, n. 1.

[d] See Aristotle, *Historia Animal.* v. 15 (546 b 19 ff.) quoted in Athenaeus, 88 d—89 a; *De Gen. Animal.* iii. 11 (761 b 32 ff.); Thompson, *Glossary*, pp. 209-218.

(980) θαυμάσειεν, ὅπου τὸ πάντων ἀμικτότατον καὶ[1] θηριωδέστατον ὧν τρέφουσι ποταμοὶ καὶ λίμναι καὶ θάλασσαι ζῷον, ὁ κροκόδειλος, θαυμαστὸν ἑαυτὸν ἐπιδείκνυται πρὸς κοινωνίαν καὶ χάριν ἐν τοῖς πρὸς τὸν τροχίλον συμβολαίοις; ὁ γὰρ τροχίλος ἐστὶ μὲν ὄρνις τῶν ἑλείων καὶ παραποταμίων, φρουρεῖ δὲ τὸν κροκόδειλον οὐκ οἰκόσιτος ἀλλὰ τοῖς ἐκείνου λειψάνοις παρατρεφόμενος· ὅταν γὰρ αἴσθηται, τοῦ E κροκοδείλου καθεύδοντος, ἐπιβουλεύοντα τὸν ἰχνεύμονα πηλούμενον ἐπ᾽ αὐτὸν ὥσπερ ἀθλητὴν κονιόμενον, ἐπεγείρει φθεγγόμενος καὶ κολάπτων· ὁ δ᾽ οὕτως ἐξημεροῦται πρὸς αὐτόν, ὥστε τοῦ στόματος διαχανὼν ἐντὸς παρίησι, καὶ χαίρει τὰ λεπτὰ τῶν ἐνισχομένων τοῖς ὀδοῦσι σαρκῶν ἐκλέγοντος ἀτρέμα τῷ ῥάμφει καὶ διασκαλεύοντος· ἂν δὲ μετρίως ἔχων ἤδη βούληται συναγαγεῖν τὸ στόμα καὶ κλεῖσαι, προκλίνει τὴν σιαγόνα καὶ διασημαίνει καὶ οὐ πρότερον καθίησιν ἢ συναισθανόμενον ἐκπτῆναι τὸν τροχίλον.

F Ὁ δὲ καλούμενος ἡγεμὼν μεγέθει μέν ἐστι καὶ σχήματι κωβιῶδες ἰχθύδιον, τὴν δ᾽ ἐπιφάνειαν ὄρνιθι φρίσσοντι διὰ τὴν τραχύτητα τῆς λεπίδος ἐοικέναι λέγεται, καὶ ἀεὶ σύνεστιν ἑνὶ τῶν μεγάλων κητῶν καὶ προνήχεται, τὸν δρόμον ἐπευθύνων,

[1] καὶ Hubert: καὶ τὸ.

[a] See Herodotus, ii. 68; Thompson on Aristotle, *Historia Animal.* ix. 6 (612 a 20); *Glossary of Greek Birds*, p. 287. Some authorities such as Pliny, *Nat. Hist.* viii. 90 and Oppian, *Cyn.* iii. 415 ff., state that the ichneumon attacks the crocodile while its mouth is open for the plover's operations. *Cf.* Boulenger, *Animal Mysteries*, p. 104, for a modern factual account (see also his *World Natural History*, p. 146).

community life of these when the most unsociable and brutal of all creatures bred in river, lake, or sea, the crocodile, shows himself marvellously proficient at partnership and goodwill in his dealings with the Egyptian plover? [a] The plover is a bird of the swamps and river banks and it guards the crocodile, not supplying its own food, but as a boarder making a meal of the crocodile's scraps.[b] Now when it perceives that, during the crocodile's sleep, the ichneumon [c] is planning to attack it, smearing itself with mud like an athlete dusting himself for the fray, the bird awakes the crocodile by crying and pecking at it. And the crocodile becomes so gentle with it that it will open its mouth and let it in and is pleased that the bird quietly pecks out, with its bill, bits of flesh which are caught in the teeth and cleans them up. When it is now satisfied and wants to close its mouth, it tilts its snout upward as an indication of its desire and does not let it down until the plover, at once perceiving the intention, flies out.

The so-called "guide" [d] is a small fish, in size and shape like a goby; but by reason of the roughness of its scales it is said to resemble a ruffled bird. It always accompanies one of the great whales, swimming in front of it and directing its course so that it

[b] *Cf.* Aelian, *De Natura Animal.* iii. 11; xii. 15; [Aristotle], *Mir. Ausc.* 7.
[c] *Cf.* 966 D *supra.*

[d] The name and the activity are appropriate to the pilot-fish (*cf.* Oppian, *Hal.* v. 62 ff.; Aelian, *De Natura Animal.* ii. 13), but the description fits rather one of the globe-fishes, such as *Diodon hystrix* (*cf.* Thompson, *Glossary*, p. 75). See also Pliny, *Nat. Hist.* ix. 186; xi. 165, who calls it the sea mouse. "Actually the . . . pilot is just a 'sponger' and accompanies the shoals . . . with the sole object of picking up such crumbs as may fall from their table." Boulenger, *Animal Mysteries*, p. 105.

(980) ὅπως οὐκ ἐνσχεθήσεται βράχεσιν οὐδ' εἰς τέναγος
981 ἤ τινα πορθμὸν ἐμπεσεῖται δυσέξοδον· ἕπεται γὰρ αὐτῷ τὸ κῆτος, ὥσπερ οἴακι ναῦς, παραγόμενον[1] εὐπειθῶς. καὶ τῶν μὲν ἄλλων, ὅ τι ἂν παραλάβῃ τῷ χάσματι ζῷον ἢ σκάφος ἢ λίθον, εὐθὺς διέφθαρται καὶ ἀπόλωλε πᾶν ἐμβεβυθισμένον· ἐκεῖνο δὲ γινῶσκον ἀναλαμβάνει τῷ στόματι καθάπερ ἄγκυραν ἐντός· ἐγκαθεύδει γὰρ αὐτῷ καὶ τὸ κῆτος ἕστηκεν ἀναπαυομένου καὶ ὁρμεῖ· προελθόντος δ' αὖθις ἐπακολουθεῖ μήθ' ἡμέρας μήτε νυκτὸς ἀπολειπόμενον, ἢ ῥέμβεται καὶ πλανᾶται, καὶ πολλὰ διεφθάρη καθάπερ ἀκυβέρνητα[2] πρὸς γῆν ἐξενεχθέντα. καὶ γὰρ ἡμεῖς περὶ Ἀντικύραν ἑωράκαμεν
B οὐ[3] πάλαι· καὶ πρότερον ἱστοροῦσιν οὐ πόρρω Βουλίδος[4] ἐξοκείλαντος καὶ κατασαπέντος λοιμὸν γενέσθαι.

Ἆρ' οὖν ἄξιόν ἐστι[5] ταύταις ταῖς κοινωνίαις καὶ συμπεριφοραῖς παραβάλλειν ἅσπερ[6] Ἀριστοτέλης ἱστορεῖ φιλίας ἀλωπέκων καὶ ὄφεων διὰ τὸ κοινὸν αὐτοῖς πολέμιον εἶναι τὸν ἀετόν, ἢ τὰς ὠτίδων πρὸς ἵππους, ὅτι χαίρουσι προσπελάζουσαι καὶ διασκάλλουσαι τὸν ὄνθον; ἐγὼ μὲν γὰρ οὐδ' ἐν μελίτταις ὁρῶ τοσαύτην ἀλλήλων ἐπιμέλειαν οὐδ' ἐν μύρμηξι· τὸ γὰρ κοινὸν αὔξουσι πᾶσαι καὶ πάν-

[1] παραγόμενον] περιαγόμενον W. C. H.
[2] καὶ πολλάκις (or τὰ πολλὰ) . . . καθάπερ πλοῖα ἀκυβέρνητα Reiske.
[3] οὐ Meziriacus: οὗ.
[4] Βουλίδος W. C. H. after C. O. Müller (Βούλεων): Βουνῶν.
[5] ἐστί τι Reiske.

may not go aground in shallows or be cut off in some lagoon or strait from which exit may be difficult. The whale follows it, as a ship obeys the helm, changing course with great docility. And whatever else, creature or boat or stone, it embraces in its gaping jaws is at once destroyed and goes to its ruin completely engulfed ; but that little fish it knows and receives inside its mouth as in a haven. While the fish sleeps within, the whale remains motionless and lies by ; but when it comes out again, the beast accompanies it and does not depart from it day or night ; or, if it does, it gets lost and wanders at random. Many, indeed, have been cast up on the land and perished, being, as it were, without a pilot.[a] We, in fact, were witnesses of such a mishap near Anticyra not long ago ; and they relate that some time ago, when a whale came aground not far from Boulis [b] and rotted, a plague ensued.

Is it, then, justifiable to compare with these associations and companionships those friendships which Aristotle [c] says exist between foxes and snakes because of their common hostility to the eagle ; or those between bustards and horses [d] because the former like to approach and pick over the dung ? As for me, I perceive even in ants or bees no such concern for each other. It is true that every one of

[a] *Cf.* the whole passage in Oppian, *Hal.* v. 70-349 on the destruction of whales.

[b] For the unknown Bouna or Bounae of the MSS. C. O. Müller (*Orchomenos*[2], p. 482) proposed Boulis, a town to the east of Anticyra on the Phocian Gulf.

[c] Frag. 354, ed. V. Rose.

[d] *Cf.* Aelian, *De Natura Animal.* ii. 28 and Mair on Oppian, *Cyn.* ii. 406.

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[6] ὥσπερ Wyttenbach : ὁ γὰρ.

(981) τες ἔργον, ἑτέρῳ δὲ καθ' ἕτερον ἑτέρου στοχασμὸς οὐδεὶς οὐδὲ φροντὶς ἔστιν.

32. Ἔτι δὲ μᾶλλον κατοψόμεθα τὴν διαφοράν,
C ἐπὶ τὰ πρεσβύτατα καὶ μέγιστα τῶν κοινωνικῶν ἔργων καὶ καθηκόντων τὰ περὶ τὰς γενέσεις καὶ τεκνώσεις τὸν λόγον τρέψαντες. πρῶτον μὲν γὰρ οἱ λίμναις παρήκουσαν ἢ ποταμοὺς ὑποδεχομένην νεμόμενοι θάλατταν ἰχθύες, ὅταν μέλλωσι τίκτειν, ἀνατρέχουσι, τῶν ποτίμων ὑδάτων τὴν πραότητα καὶ τὸ ἄσαλον διώκοντες· ἀγαθὴ γὰρ ἡ γαλήνη λοχεῦσαι· καὶ τὸ ἄθηρον ἅμα ταῖς λίμναις ἔνεστι καὶ ποταμοῖς, ὥστε σῴζεσθαι τὰ τικτόμενα. διὸ καὶ πλεῖστα καὶ μάλιστα γονεύεται περὶ τὸν Εὔξεινον πόντον· οὐ γὰρ τρέφει κήτη γ'[1] ἀλλ' ἢ φώκην ἀραιὰν καὶ δελφῖνα μικρόν. ἔτι[2] δ' ἡ τῶν ποταμῶν ἐπιμιξία, πλείστων καὶ μεγίστων ἐκδιδόντων εἰς
D τὸν Πόντον, ἤπιον παρέχει καὶ πρόσφορον τοῖς λοχευομένοις κρᾶσιν. τὸ δὲ τοῦ ἀνθίου θαυμασιώτατόν ἐστιν, ὃν Ὅμηρος "ἱερὸν ἰχθὺν" εἴρηκε· καίτοι μέγαν τινὲς οἴονται τὸν ἱερὸν καθάπερ ὀστοῦν ἱερὸν τὸ μέγα, καὶ τὴν ἐπιληψίαν, μεγάλην νόσον οὖσαν, ἱερὰν καλοῦσιν· ἔνιοι δὲ κοινῶς τὸν ἄφετον

[1] γ' added by Bernardakis. [2] ἔτι Xylander: ὅτι.

[a] See 981 E *infra*; Pliny, *Nat. Hist.* ix. 71.
[b] *Cf.* Aristotle, *Historia Animal.* viii. 13 (598 b 2); Pliny,

them promotes the common task, yet none of them has any interest in or regard for his fellow individually.

32. And we shall observe this difference even more clearly when we turn our attention to the oldest and most important of social institutions and duties, those concerned with generation and procreation. Now in the first place those fish that inhabit a sea that borders on lagoons or receives rivers resort to these when they are ready to deposit their eggs, seeking the tranquillity and smoothness of fresh water, since calm is a good midwife. Besides, lagoons and rivers are devoid of sea monsters,[a] so that the eggs and fry may survive. This is the reason why the Black Sea is most favoured for spawning by very many fish. It breeds no large sea beasts at all except an infrequent seal and a small dolphin [b]; besides, the influx of rivers —and those which empty into the Black Sea are numerous and very large—creates a gentle blend conducive to the production of offspring. The most wonderful tale is told about the *anthias*,[c] which Homer [d] calls "Sacred Fish." [e] Yet some think that "sacred" means "important," just as we call the important bone *os sacrum* [f] and epilepsy, an important disease, the sacred disease.[g] Others interpret it in the ordinary sense as meaning "dedicated" or "con-

Nat. Hist. ix. 49 f.; Aelian, *De Natura Animal.* iv. 9; ix. 59; Mair on Oppian, *Hal.* i. 599; Amm. Marc. xxii. 8. 47; Thompson, *Glossary*, pp. 54, 281.

[c] On the identity see note on 977 C *supra*.

[d] *Iliad*, xvi. 407.

[e] See Gow on Theocritus, frag. 3. Homer does not call the *anthias* "Sacred Fish," but merely alludes to *a* sacred fish; and in later times several were so regarded.

[f] The last bone of the spine.

[g] *Cf.* [Hippocrates], *De Morbo Sacro* (L.C.L., vol. ii, pp. 138 ff.); Herodotus, iii. 33; Plato, *Timaeus*, 85 A-B.

(981) καὶ ἱερωμένον.[1] Ἐρατοσθένης δὲ τὸν χρύσοφρυν ἔοικεν

ἢ δρομίην[2] χρύσειον ἐπ' ὀφρύσιν ἱερὸν ἰχθὺν

λέγειν· πολλοὶ δὲ τὸν ἔλλοπα, σπάνιος γάρ ἐστι καὶ οὐ ῥᾴδιος ἁλῶναι. φαίνεται δὲ περὶ Παμφυλίαν πολλάκις· ἂν οὖν ποτε λάβωσι, στεφανοῦνται μὲν αὐτοί, στεφανοῦσι δὲ τὰς ἁλιάδας, κρότῳ δὲ καὶ
E πατάγῳ καταπλέοντας αὐτοὺς ὑποδέχονται καὶ τιμῶσιν. οἱ δὲ πλεῖστοι τὸν ἀνθίαν ἱερὸν εἶναι καὶ λέγεσθαι νομίζουσιν· ὅπου γὰρ ἂν ἀνθίας ὀφθῇ, θηρίον οὐκ ἔστιν, ἀλλὰ θαρροῦντες μὲν οἱ σπογγοθῆραι κατακολυμβῶσι, θαρροῦντες δὲ τίκτουσιν οἱ ἰχθύες ὥσπερ ἐγγυητὴν ἀσυλίας ἔχοντες. ἡ δ' αἰτία δυσλόγιστος, εἴτε φεύγει τὰ θηρία τὸν ἀνθίαν ὡς σῦν ἐλέφαντες, ἀλεκτρυόνα δὲ λέοντες· εἴτ' ἔστι σημεῖα τόπων ἀθήρων, ἃ γιγνώσκει καὶ παραφυλάττει συνετὸς ὢν καὶ μνημονικὸς ὁ ἰχθύς.

33. Ἀλλ' ἥ γε πρόνοια[3] κοινὴ τοῖς τίκτουσι τῶν γεννωμένων· οἱ δ' ἄρρενες οὐ τὸν αὑτῶν κατεσθί-
F ουσι γόνον, ἀλλὰ καὶ προσδιατρίβουσι τοῖς κυήμασιν ᾠοφυλακοῦντες ὡς ἱστόρηκεν Ἀριστοτέλης· οἱ δὲ ἑπόμενοι ταῖς θηλείαις, καταρραίνουσι[4] κατὰ[5]

[1] ἱερωμένον] Wyttenbach says all mss. read ἱέμενον (a gloss to ἄφετον? ἀνειμένον? ἄνετον? See Athenaeus, 284 c-d), but Hubert gives no variant.
[2] ἢ δρομίην Athenaeus, 284 d : εὐδρομίην.
[3] ἀλλ' ἡ μὲν πρόνοια Reiske.
[4] καταρραίνουσι Reiske : καταρρέουσι.
[5] κατὰ added by Reiske.

[a] Powell, *Collectanea Alexandrina*, p. 60, frag. 12. 3; Hiller, frag. 14 (p. 31).
[b] See Mair on Oppian, *Hal.* i. 169.
[c] See 979 c *supra*. They are wrong, for while both the

secrated." Eratosthenes [a] seems to refer to the gilthead [b] when he says

Swift courser golden-browed, the sacred fish.

Many say that this is the sturgeon,[c] which is rare and hard to catch, though it is often seen off the coast of Pamphylia. If any ever do succeed in catching it, they put on wreaths themselves and wreathe their boats; and, as they sail past, they are welcomed and honoured with shouts and applause. But most authorities hold that it is the *anthias* that is and is called "sacred," for wherever this fish appears there are no sea monsters. Sponge-fishers [d] may dive in confidence and fish may spawn without fear, as though they had a guarantor of their immunity. The reason for this is a puzzle: whether the monsters avoid the *anthias* as elephants do a pig [e] and lions a cock,[f] or whether there are indications of places free from monsters, which the fish comes to know and frequents, being an intelligent creature with a good memory.

33. Then again the care of the young is shared by both parents: the males do not eat their own young, but stand by the spawn to guard the eggs, as Aristotle [g] relates. Some follow the female and sprinkle the eggs gradually with milt, for otherwise

gilthead and the sturgeon were sacred fish, the description points clearly to the gilthead.

[d] *Cf.* 950 c *supra*; Pliny, *Nat. Hist.* ix. 153; Thompson, *Glossary*, p. 15.

[e] *Cf.* Aelian, *De Natura Animal.* i. 38; viii. 28; xvi. 36; *al.*

[f] *Cf.* Aelian, *De Natura Animal.* iii. 31; vi. 22; viii. 28; *al.*

[g] *Historia Animal.* ix. 37 (621 a 21 ff.); *cf.* Herodotus, ii. 93.

(981) μικρὸν τὸν θορόν· ἄλλως γὰρ οὐ γίνεται μέγα τὸ τεχθέν, ἀλλ' ἀτελὲς μένει καὶ ἄναυξον.[1] ἰδίᾳ δ' αἱ φυκίδες ἐκ τῶν φυκίων οἷον νεοττιὰν διαπλασάμεναι περιαμπέχουσι τὸν γόνον καὶ σκέπουσιν ἀπὸ τοῦ κλύδωνος.

982 Τοῦ δὲ γαλεοῦ τὸ φιλόστοργον οὐδενὶ τῶν ἡμερωτάτων ζῴων ὑπερβολὴν γλυκυθυμίας πρὸς τὰ ἔκγονα καὶ χρηστότητος ἀπολέλοιπε· τίκτουσι μὲν γὰρ ᾠόν, εἶτα ζῷον οὐκ ἐκτὸς ἀλλ' ἐντὸς ἐν ἑαυτοῖς καὶ τρέφουσιν οὕτω καὶ φέρουσιν ὥσπερ ἐκ δευτέρας γενέσεως· ὅταν δὲ μείζονα γένηται, μεθιᾶσι θύραζε καὶ διδάσκουσι νήχεσθαι πλησίον· εἶτα πάλιν εἰς ἑαυτοὺς διὰ τοῦ στόματος ἐπαναλαμβάνουσι καὶ παρέχουσιν ἐνδιαιτᾶσθαι τὸ σῶμα χώραν ἅμα καὶ τροφὴν καὶ καταφυγήν, ἄχρις ἂν ἐν δυνάμει τοῦ βοηθεῖν αὑτοῖς γένηται.

B Θαυμαστὴ δὲ καὶ ἡ τῆς χελώνης περὶ τὴν γένεσιν καὶ σωτηρίαν τῶν γεννωμένων ἐπιμέλεια· τίκτει μὲν γὰρ ἐκβαίνουσα τῆς θαλάττης πλησίον, ἐπῳάζειν δὲ μὴ δυναμένη μηδὲ χερσεύειν πολὺν χρόνον ἐντίθησι τῇ ψάμμῳ τὰ ᾠὰ καὶ τὸ λειότατον ἐπαμᾶται τῆς θινὸς αὐτοῖς καὶ μαλακώτατον· ὅταν δὲ καταχώσῃ καὶ ἀποκρύψῃ βεβαίως, οἱ μὲν λέγουσι τοῖς ποσὶν ἀμύττειν καὶ καταστίζειν τὸν τόπον,

[1] ἀναυξές Hatzidakis.

[a] The *phycis* is almost certainly one of the wrasses, probably in particular *Crenilabrus pavo* C.V. See Mair, L.C.L. *Oppian*, p. liii; Thompson, *Glossary*, pp. 276-278; Andrews, *Journal of The Washington Academy of Sciences*, xxxix (1949), pp. 12-14.

the spawn will not grow, but remains imperfect and undeveloped. In particular the wrasse [a] makes a sort of nest of seaweed, envelops the spawn in it, and shelters it from the waves.

The affection of the dogfish [b] for its young is not inferior in warmth and kindliness to that of any of the tamest animals; for they lay the egg, then sustain and carry the newly hatched young, not without, but within themselves, as if from a second birth. When the young grow larger, the parents let them out and teach them to swim close by; then again they collect them through their mouths and allow their bodies to be used as dwelling-places, affording at once room and board and sanctuary until the young become strong enough to shift for themselves.[c]

Wonderful also is the care of the tortoise for the birth and preservation of her young. To bear them she comes out of the sea to the shore near at hand; but since she is unable to incubate the eggs or to remain on dry land for long, she deposits them on the strand and heaps over them the smoothest and softest part of the sand. When she has buried and concealed them securely,[d] some say that she scratches and scribbles the place with her feet, making it easy

[b] *Cf. Mor.* 494 c; 730 e; Thompson on Aristotle, *Historia Animal.* vi. 10 (565 a 22 ff., b 2 ff.); *Glossary*, pp. 39-42; Mair on Oppian, *Hal.* i. 734.

[c] "Aristotle (*Historia Animal.* 565 b 24) reports that some dogfish brought forth their young by the mouth and took them therein again. Athenaeus (vii. 294 e) says that the dogfish took the young just hatched into its mouth and emitted them again. Plutarch has a somewhat garbled version of this presumed process, blended with data on the parental care of dolphins (*cf.* Plin. *N.H.* ix. 21)" (Andrews).

[d] *Cf.* Pliny, *Nat. Hist.* ix. 37; contrast the forgetful lizard (x. 187).

(982) εὔσημον ἑαυτῇ ποιοῦσαν, οἱ δὲ τὴν θήλειαν ὑπὸ τοῦ ἄρρενος στρεφομένην τύπους ἰδίους καὶ σφραγῖδας ἐναπολείπειν· ὃ δὲ τούτου θαυμασιώτερόν ἐστιν, ἡμέραν ἐκφυλάξασα τεσσαρακοστήν (ἐν τοσαύταις C γὰρ ἐκπέττεται καὶ περιρρήγνυται τὰ ᾠά), πρόσεισι καὶ γνωρίσασα τὸν ἑαυτῆς ἑκάστη θησαυρόν, ὡς οὐδεὶς χρυσίου θήκην ἄνθρωπος, ἀσμένως ἀνοίγει καὶ προθύμως.

34. Τῶν δὲ κροκοδείλων τὰ μὲν ἄλλα παραπλήσια, τῆς δὲ χώρας ὁ στοχασμὸς ἐπίνοιαν ἀνθρώπῳ τῆς αἰτίας οὐ δίδωσιν οὐδὲ συλλογισμόν· ὅθεν οὔ φασι λογικὴν ἀλλὰ μαντικὴν εἶναι τὴν ἐπὶ[1] τούτου τοῦ θηρίου πρόγνωσιν· οὔτε γὰρ πλέον οὔτ' ἔλαττον ἐκβᾶσ' ἀλλ' ὅσον εἰς ὥραν ἔτους ὁ Νεῖλος αὐξηθεὶς ἐπικλύσει καὶ ἐπικρύψει τῆς γῆς, ἐκεῖ τὰ ᾠὰ τίθησιν· ὥστε τὸν ἐντυχόντα τῶν γεωρ-D γῶν αὐτόν τε[2] γινώσκειν ἑτέροις τε φράζειν, ὁπόσον αὐτοῖς ὁ ποταμὸς πρόεισιν· οὕτω συνεμετρήσατο, μὴ βρεχομένων αὐτὸς βρεχόμενος ἐπῳάζῃ. ἐκλαπέντων[3] δὲ τῶν σκύμνων, ὃς ἂν εὐθὺς ἀναδὺς μὴ λάβῃ τι τῶν προστυχόντων, ἢ μυῖαν ἢ σέριφον ἢ γῆς ἔντερον ἢ κάρφος ἢ βοτάνην τῷ στόματι, διασπαράξασα τοῦτον ἡ μήτηρ ἀπέκτεινε δακοῦσα· τὰ δὲ θυμοειδῆ καὶ δραστήρια στέργει καὶ περιέπει,

[1] ἐπὶ Basil., Xylander : περὶ (παρὰ Bernardakis ; Meziriacus deletes).
[2] αὐτόν τε Bernardakis : αὐτόν.

for her to recognize; others affirm that it is because she has been turned on her back by the male that she leaves peculiar marks and impressions about the place. But what is more remarkable than this, she waits for the fortieth day [a] (for that is the number required to develop and hatch out the eggs) and then approaches. And each tortoise recognizes her own treasure and opens it more joyously and eagerly than a man does a deposit of gold.

34. The accounts given of the crocodile are similar in other respects, but the animal's ability to estimate the right place goes beyond man's power to guess or calculate the cause. Hence they affirm that this creature's foreknowledge is divine and not rational. For neither to a greater or a less distance, but just so far as the Nile will spread that season and cover the land in flood, just so far does she go to deposit her eggs, with such accuracy that any farmer finding the eggs may know himself and predict to others how far the river will advance.[b] And her purpose in being so exact is to prevent either herself or her eggs getting wet when she sits on them. When they are hatched, the one which, upon emerging, does not immediately seize in its mouth anything that comes along, fly or midge or worm or straw or plant, the mother tears to pieces and bites to death [c]; but those that are bold and active she loves and tends, thus

[a] *Cf.* Aelian, *Varia Hist.* i. 6.

[b] See Aelian, *De Natura Animal.* v. 52; and compare B. Evans, *The Natural History of Nonsense*, p. 33.

[c] *Cf.* Aelian, *De Natura Animal.* ix. 3; contrast Pliny, *Nat. Hist.* x. 10; Antigonus, 46, of the sea eagle; Lucan, ix. 902 ff., of the eagle. See also Julian, *Epistle* 59 (383 c); 78 (418 D) with Wright's note (L.C.L. vol. iii, p. 259, n. 2).

[3] ἐκλαπέντων Bernardakis: ἐκλιπόντων or ἐκλεπισθέντων.

(982) καθάπερ οἱ σοφώτατοι τῶν ἀνθρώπων ἀξιοῦσι, κρίσει τὸ φιλεῖν, οὐ πάθει νέμουσα.

Καὶ μὴν αἱ φῶκαι τίκτουσι μὲν ἐν τῷ ξηρῷ, κατὰ μικρὸν δὲ προάγουσαι τὰ σκυμνία γεύουσι τῆς

E θαλάττης καὶ ταχὺ πάλιν ἐξάγουσι· καὶ τοῦτο πολλάκις ποιοῦσιν ἐν μέρει, μέχρι ἂν οὕτως ἐθιζόμενα θαρρήσῃ καὶ στέρξῃ τὴν ἔναλον δίαιταν.

Οἱ δὲ βάτραχοι περὶ τὰς ὀχείας ἀνακλήσεσι χρῶνται, τὴν λεγομένην ποιοῦντες ὀλολυγόνα, φωνὴν ἐρωτικὴν καὶ γαμήλιον οὖσαν· ὅταν δὲ τὴν θήλειαν ὁ ἄρρην οὕτω προσαγάγηται, κοινῇ[1] τὴν νύκτα περιμένουσιν· ἐν ὑγρῷ μὲν γὰρ οὐ δύνανται, μεθ' ἡμέραν δὲ δεδίασιν ἐπὶ γῆς μίγνυσθαι· γενομένου δὲ σκότους, ἀδεῶς συμπλέκονται προϊόντες. ἄλλοτε[2] δὲ λαμπρύνουσι τὴν φωνήν, ὑετὸν προσδεχόμενοι· καὶ τοῦτο[3] σημεῖον ἐν τοῖς βεβαιοτάτοις ἐστίν.

35. Ἀλλ' οἷον, ὦ φίλε Πόσειδον, ὀλίγου πάθος ὡς ἄτοπον πέπονθα καὶ καταγέλαστον, εἴ με διατρί-

F βοντα περὶ φώκας καὶ βατράχους τὸ σοφώτατον καὶ θεοφιλέστατον ἐξέφυγε καὶ παρῆλθε τῶν ἐνάλων. ποίας γὰρ ἀηδόνας ἄξιον τῷ φιλομούσῳ τῆς ἀλκυόνος ἢ τῷ φιλοτέκνῳ[4] χελιδόνας ἢ τῷ φιλάνδρῳ πελειάδας ἢ τῷ τεχνικῷ παραβάλλειν μελίττας;

[1] κοινῇ early editors: κοινήν.
[2] ἄλλοτε W. C. H.: ἄλλως.
[3] τοῦτο τὸ Emperius.
[4] φιλοτέκνῳ Meziriacus: φιλοτέχνῳ.

[a] Apparently with reference to Theophrastus, frag. 74 (*cf. Mor.* 482 B).
[b] *Cf.* Aelian, *De Natura Animal.* ix. 9; Oppian, *Hal.* i. 686 ff.; Pliny, *Nat. Hist.* ix. 41.

bestowing her affection by judgement, as the wisest of men think right, not by emotion.[a]

Furthermore, seals [b] too bear their young on dry land and little by little induce their offspring to try the sea, then quickly take them out again. This they do often at intervals until the young are conditioned in this way to feel confidence and enjoy life in the sea.

Frogs in their coupling use a call, the so-called *ololygon*,[c] a cry of wooing and mating. When the male has thus attracted the female, they wait for the night together, for they cannot consort in the water and during the day they are afraid to do so on land; but when the darkness falls, they come out and embrace with impunity. On other occasions when their cry is shrill, it is because they expect rain.[d] And this is among the surest of signs.

35. But, dear Poseidon! What an absurd and ridiculous error I have almost fallen into: while I am spending my time on seals and frogs, I have neglected and omitted the wisest of sea creatures, the most beloved of the gods! [e] For what nightingales are to be compared with the halcyon [f] for its love of sweet sound, or what swallows for its love of offspring, or what doves for its love of its mate, or what bees for its skill in construction? What creature's procreation

[c] See Gow on Theocritus, vii. 139; Boulenger, *Animal Mysteries*, pp. 67 f.

[d] *Cf. Mor.* 912 c-d; Aratus, *Phaenomena*, 946 ff.; *cf.* Aelian, *De Natura Animal.* vi. 19; ix. 13.

[e] As it is to Thetis: Virgil, *Georgics*, i. 399.

[f] See Thompson, *Glossary of Greek Birds*, *s.v.*; Kraak, *Mnemosyne* (3rd series), vii. 142; Pliny, *Nat. Hist.* x. 89 ff.; Aelian, *De Natura Animal.* vii. 17; Gow on Theocritus, vii. 57; and the pleasant work *Halcyon* found in mss. of Lucian and Plato.

(982) τίνος δὲ γενέσεις καὶ τόκους καὶ ὠδῖνας ὁ θεὸς οὕτως ἐτίμησε; τὰς μὲν γὰρ Λητοῦς γονὰς μίαν ἑδρασθεῖσαν ὑποδέξασθαι νῆσον ἱστοροῦσι, τῇ δ' ἀλκυόνι τικτούσῃ περὶ τροπὰς πᾶσαν ἵστησι θά-
983 λασσαν ἀκύμονα καὶ ἀσάλευτον.[1] ὅθεν οὐδὲν ἔστι ζῷον ἄλλο, ὃ μᾶλλον[2] φιλοῦσιν ἄνθρωποι, ᾗ δι'[3] ἣν ἑπτὰ μὲν ἡμέρας ἑπτὰ δὲ νύκτας ἐν ἀκμῇ χειμῶνος ἀδεῶς πλέουσι, τῆς κατὰ γῆν πορείας τηνικαῦτα τὴν διὰ τῆς θαλάσσης ἀσφαλεστέραν ἔχοντες. εἰ δὲ δεῖ καὶ περὶ ἑκάστης τῶν ἀρετῶν ἃς ἔχει βραχέα φάναι, φίλανδρος μὲν οὕτως ἐστίν, ὥστε μὴ καθ' ἕνα καιρὸν ἀλλὰ δι' ἔτους συνεῖναι καὶ προσδέχεσθαι τὴν τοῦ ἄρρενος ὁμιλίαν οὐ διὰ τὸ ἀκόλαστον (ἄλλῳ γὰρ οὐ μίγνυται τὸ παράπαν), ἀλλ' ὑπ' εὐνοίας ὥσπερ γυνὴ γαμετὴ καὶ φιλοφροσύνης· ὅταν δὲ διὰ γῆρας ἀσθενὴς ὁ ἄρρην γένηται συνέπεσθαι καὶ
B βαρύς, ὑπολαβοῦσα γηροφορεῖ καὶ γηροτροφεῖ, μηδαμοῦ προϊεμένη μηδὲ καταλείπουσα[4] χωρίς, ἀλλὰ τοῖς ὤμοις ἐκεῖνον ἀναθεμένη καὶ κομίζει πανταχόσε καὶ θεραπεύει καὶ σύνεστιν ἄχρι τελευτῆς.

Τῷ δὲ φιλοτέκνῳ καὶ πεφροντικότι σωτηρίας τῶν γεννωμένων συναισθανομένη κύουσαν ἑαυτὴν τάχιστα τρέπεται πρὸς ἐργασίαν τῆς νεοττιᾶς, οὐ φύρουσα πηλὸν οὐδὲ προσερείδουσα τοίχοις καὶ

[1] ἀσάλευτον Leonicus : ἀστάλακτον.
[2] μᾶλλον added by Pohlenz.
[3] ᾗ δι' Reiske : δι'.
[4] καταλείπουσα Bernardakis : καταλιποῦσα.

[a] Poseidon.
[b] For the birth of Apollo and Artemis.
[c] Delos, the wandering island.

and birth pangs has the god [a] so honoured? For Leto's parturition,[b] so they say, only one island [c] was made firm to receive her; but when the halcyon lays her eggs, about the time of the winter solstice, the god [a] brings the whole sea to rest, without a wave, without a swell. And this is the reason why there is no other creature that men love more. Thanks to her they sail the sea without a fear in the dead of winter for seven days and seven nights.[d] For the moment, journey by sea is safer for them than by land. If it is proper to speak briefly of her several virtues, she is so devoted to her mate that she keeps him company, not for a single season, but throughout the year. Yet it is not through wantonness that she admits him to her company, for she never consorts at all with any other male; it is through friendship and affection, as with any lawful wife. When by reason of old age the male becomes too weak and sluggish to keep up with her, she takes the burden on herself, carries him and feeds him, never forsaking, never abandoning him; but mounting him on her own shoulders, she conveys him everywhere she goes and looks after him, abiding with him until the end.[e]

As for love of her offspring and care for their preservation, as soon as she perceives herself to be pregnant, she applies herself to building the nest,[f] not making pats of mud or cementing it on walls and

[d] The Halcyon Days (Suidas, *s.v.*); Aristotle, *Historia Animal.* v. 8 (542 b 6 ff.); Aelian, *De Natura Animal.* i. 36; Pliny, *Nat. Hist.* xviii. 231; *al.*

[e] *Cf.* Alcman's famous lines: frag. 26 Edmonds (*Lyra Graeca*, i, p. 72, L.C.L.), frag. 94 Diehl (*Anth. Lyrica*, ii, p. 34); Antigonus, *Hist. Mirab.* 23; *al.*

[f] *Cf. Mor.* 494 A-B; Aristotle, *Historia Animal.* ix. 13 (616 a 19 ff.); Aelian, *De Natura Animal.* ix. 17.

(983) ὀρόφοις ὥσπερ αἱ χελιδόνες, οὐδὲ χρωμένη πολλοῖς τοῦ σώματος ἐνεργοῖς μέρεσιν, ὥσπερ τῆς μελίττης ἐνδυομένης τῷ σώματι καὶ[1] τὸ κηρίον ἀνοιγούσης ὁμοῦ ψαύοντες οἱ ἓξ πόδες[2] εἰς ἑξάγωνα τὸ πᾶν[3]
C ἀγγεῖα διαιροῦσιν· ἡ δ' ἀλκυὼν ἓν ὄργανον ἁπλοῦν, ἓν ὅπλον, ἓν ἐργαλεῖον ἔχουσα, τὸ στόμα, καὶ μηδὲν ἄλλο τοῦ φιλοπόνου καὶ φιλοτέχνου[4] συνεργόν, οἷα μηχανᾶται καὶ δημιουργεῖ χαλεπόν ἐστι πεισθῆναι μὴ καταμαθόντας ὄψει τὸ πλαττόμενον ὑπ' αὐτῆς, μᾶλλον δὲ ναυπηγούμενον, σχημάτων πολλῶν[5] μόνον ἀπερίτρεπτον καὶ ἀβάπτιστον· συλλέξασα γὰρ τὰς τῆς βελόνης ἀκίδας συντίθησι καὶ συνδεῖ πρὸς ἀλλήλας ἐγκαταπλέκουσα τὰς μὲν εὐθείας τὰς δὲ πλαγίας, ὥσπερ ἐπὶ στήμονι κρόκην ἐμβάλλουσα, προσχρωμένη καμπαῖς καὶ περιαγωγαῖς δι' ἀλλήλων, ὥστε διαρμόσαι καὶ γενέσθαι στρογγύλον ἕν, ἠρέμα[6] πρόμηκες[7] τοῦ σχήματος,
D ἁλιευτικῷ κύρτῳ παραπλήσιον. ὅταν δὲ συντελέσῃ, φέρουσα παρέθηκε παρὰ τὸ κλύσμα τοῦ κύματος, ὅπου προσπίπτουσα μαλακῶς ἡ θάλασσα τὸ μὲν οὐ[8] καλῶς ἀραρὸς ἐδίδαξεν ἀκέσασθαι καὶ καταπυκνῶσαι, χαλώμενον ὁρῶσαν ὑπὸ τῆς πληγῆς· τὰ δ' ἡρμοσμένα κατασφίγγει καὶ πήγνυσιν, ὥστε καὶ λίθῳ καὶ σιδήρῳ δυσδιάλυτον εἶναι καὶ δύστρωτον. οὐδενὸς δ' ἧσσον ἀξιοθαύμαστόν ἐστιν ἥ τε συμ-

[1] *καὶ* added by Meziriacus.
[2] *οἱ ἓξ πόδες* added by Meziriacus.
[3] *εἰς ἑξάγωνα τὸ πᾶν* Meziriacus : *εἰς ἀγῶνα τόπον.*
[4] *φιλοτέχνου* Reiske : *φιλοτέκνου.*
[5] *πολλῶν*] *πάντων* ?
[6] *ἕν, ἠρέμα* Post : *ἐνήρεμον* (*εὔηρες* W. C. H., *cf. Vita Ant.* 65 ; *εὐηρεφὲς* van Herwerden).
[7] *πρόμηκες* Reiske : *προμήκει.*
[8] *οὐ*] *οὐκέτι* ?

roofs like the house-martin[a]; nor does she use the activity of many different members of her body, as when the bee employs its whole frame to enter and open the wax, with all six feet pressing at the same time to fashion the whole mass into hexagonal cells. But the halcyon, having but one simple instrument, one piece of equipment, one tool—her bill and nothing else, co-operating with her industry and ingenuity—what she contrives and constructs would be hard to believe without ocular evidence, seeing the object that she moulds—or rather the ship that she builds. Of many possible forms, this alone cannot be capsized[b] or even wet its cargo. She collects the spines of garfish[c] and binds and weaves them together, some straight, others transverse, as if she were thrusting woven threads through the warp, adding such bends and knots of one with another that a compact, rounded unit is formed, slightly prolate in shape, like a fisherman's weel. When it is finished, she brings and deposits it beside the surging waves, where the sea beats gently upon it and instructs her how to mend and strengthen whatever is not yet good and tight, as she observes it loosened by the blows. She so tautens and secures the joints that it is difficult even for stones or iron to break or pierce it. The proportions and shape of the hollow interior are as

[a] *Cf.* 966 D-E *supra*.

[b] Aristotle (*loc. cit.*), on the contrary, seems to say (though his text is corrupt; see Thompson *ad loc.*): "The opening is small, just enough for a tiny entrance, so that even if the nest is upset, the sea does not enter."

[c] *Belone* was usually a term for the garfish and the needlefish, neither of which has spines of any size. Thompson (*Glossary*, pp. 31-32) rightly regards the meaning of *belone* here as indeterminable. *Cf.* also *Mor.* 494 A, which is almost certainly mistranslated in the L.C.L. edition.

(983) μετρία τό τε σχῆμα τῆς τοῦ ἀγγείου κοιλότητος· πεποίηται γὰρ αὐτὴν ἐκείνην μόνην ἐνδυομένην δέχεσθαι, τοῖς δ' ἄλλοις τυφλὸν εἶναι πάντη καὶ
E κρύφιον, ὥστε παριέναι μηδὲν εἴσω μηδὲ τῆς θαλάττης. οἶμαι μὲν οὖν μηδέν' ὑμῶν ἀθέατον εἶναι τῆς νεοττιᾶς· ἐμοὶ δὲ πολλάκις ἰδόντι καὶ θιγόντι παρίσταται λέγειν καὶ ᾄδειν

Δήλῳ δή ποτε τοῖον Ἀπόλλωνος παρὰ ναῷ[1]

τὸν κεράτινον βωμὸν εἶδον ἐν τοῖς ἑπτὰ καλουμένοις θεάμασιν ὑμνούμενον, ὅτι μήτε κόλλης δεόμενος μήτε τινὸς ἄλλου δεσμοῦ διὰ μόνων τῶν δεξιῶν συμπέπηγε καὶ συνήρμοσται κεράτων. ἵλεως δ' ὁ θεὸς εἴη καὶ προσήκει[2] τὸν[3] μουσικὸν ὄντα καὶ νησιώτην, ὑμνουμένης[4] τῆς πελαγίου σειρῆνος, εὐμενῶς καταγελᾶν[5] τῶν ἐρωτημάτων ἐκείνων, ἃ σκώπτοντες ἐρωτῶσιν οὗτοι, διὰ τί Ἀπόλλων οὐ γογγροκτόνος[6] οὐδὲ τριγλοβόλος ἢ Ἄρτεμις, ἅτε[7] δὴ γινώσκοντα τὴν ἐκ θαλάττης γενομένην Ἀφρο-
F δίτην ὁμοῦ τι πάντα τὰ[8] κατὰ θάλατταν ποιουμένην αὐτῆς ἱερὰ καὶ ἀδελφὰ καὶ μηδενὶ φονευομένῳ[8]

[1] ναῷ] βωμῷ the mss. of Homer.
[2] προσήκει van Herwerden: πρὸς.
[3] τὸν Post: τι.
[4] ὑμνουμένης old editors: ὑμένης.
[5] καὶ before καταγελᾶν deleted by W. C. H.
[6] οὐ γογγροκτόνος Salmasius: συθ'.
[7] τριγλοβόλος ἢ Ἄρτεμις, ἅτε added by Bernardakis after Salmasius.
[8] τὴν ἐκ θαλάττης added by Bernardakis; γενομένην by W. C. H.; τι by Bernardakis; πάντα τὰ by Wyttenbach.
[9] μηδενὶ φονευομένῳ Wyttenbach: μηδὲν ὀνευομένῳ.

admirable as anything about it; for it is so constructed as to admit herself only, while the entrance remains wholly hidden and invisible to others—with the result that not even a drop of water can get in. Now I presume that all of you have seen this nest; as for me, since I have often seen and touched it, it comes to my mind to chant the words

> Once such a thing in Delos near Apollo's shrine [a]

I saw, the Altar of Horn, celebrated as one of the Seven Wonders of the World [b] because it needs no glue or any other binding, but is joined and fastened together, made entirely of horns taken from the right side of the head.[c] Now may the god [d] be propitious to me while I sing of the Sea Siren [e]—and indeed, being both a musician and an islander, he should laugh good-naturedly at my opponents' scoffing questions. Why should he not be called a "conger-slayer" or Artemis be termed a "surmullet-slayer"? [f] Since he well knows that Aphrodite, born of the sea, regards practically all sea creatures as sacred and related to herself and relishes the

[a] Homer, *Odyssey*, vi. 162. "That there was some religious mystery associated with the so-called nest is indicated by the close of Plutarch's description." (Thompson on Aristotle, *loc. cit.*)

[b] *Cf.* Strabo, xiv. 2. 5.

[c] Curiously enough, the *Life of Theseus*, xxi. 2 (9 E) says the "left side."

[d] Apollo. From this point on the text of the rest of this chapter is very bad and full of lacunae. The restorations adopted here are somewhat less than certain.

[e] This is not fulfilled and so is presumably an indication of another lacuna toward the end of Phaedimus' speech, the location of which we cannot even guess.

[f] *Cf.* 966 A *supra.*

(983) χαίρουσαν. ἐν δὲ Λέπτει τοὺς ἱερεῖς τοῦ Ποσειδῶνος οὐδὲν ἔναλον τὸ παράπαν ἐσθίοντας, τρίγλαν δὲ τοὺς ἐν Ἐλευσῖνι μύστας σεβομένους ἴστε, καὶ τῆς Ἥρας ἐν Ἄργει τὴν ἱέρειαν ἀπεχομένην ἐπὶ τιμῇ τοῦ ζῴου· τὸν γὰρ θαλάττιον λαγωόν, ὅς ἐστιν ἀνθρώπῳ θανάσιμος, κτείνουσιν αἱ τρίγλαι μάλιστα καὶ καταναλίσκουσι· διὸ ταύτην ὡς φιλάνθρωπα καὶ σωτήρια ζῷα τὴν ἄδειαν ἔχουσι.

984 36. Καὶ μὴν Ἀρτέμιδός γε Δικτύννης Δελφινίου τ' Ἀπόλλωνος ἱερὰ καὶ βωμοὶ παρὰ πολλοῖς εἰσιν Ἑλλήνων· ὃν δ' αὐτὸς ἑαυτῷ τόπον ἐξαίρετον ὁ θεὸς πεποίηταί φησιν ὁ ποιητής,[1] Κρητῶν ἀπογόνους οἰκοῦντας[2] ἡγεμόνι δελφῖνι χρησαμένους· οὐ γὰρ ὁ θεὸς[3] προενήχετο[4] τοῦ στόλου μεταβαλὼν τὸ εἶδος, ὡς οἱ μυθογράφοι λέγουσιν, ἀλλὰ δελφῖνα πέμψας τοῖς ἀνδράσιν ἰθύνοντα τὸν πλοῦν κατήγαγεν εἰς Κίρραν. ἱστοροῦσι δὲ καὶ τοὺς πεμφθέντας[5] εἰς Σινώπην ὑπὸ Πτολεμαίου τοῦ Σωτῆρος ἐπὶ τὴν Σαράπιδος κομιδήν, Σωτέλη[6] καὶ Διονύσιον, ἀπωσθέντας[7] ἀνέμῳ βιαίῳ κομίζεσθαι παρὰ γνώμην
B ὑπὲρ Μαλέαν, ἐν δεξιᾷ Πελοπόννησον ἔχοντας, εἶτα ῥεμβομένους καὶ δυσθυμοῦντας αὐτοὺς προφανέντα

[1] φησιν ὁ ποιητής added by van Herwerden.
[2] ἀπογόνους οἰκοῦντας] ἀποικίαν ἡγοῦνται Meziriacus ; ἀποικοῦντας Bernardakis ; ἐπήγαγε τοὺς οἰκοῦντας Post.
[3] οὐ γὰρ ὁ θεὸς] οὐ μὴν ὁ θεός γε ?
[4] προενήχετο Xylander ; προενήνοχε τὸ.
[5] πεμφθέντας Xylander : περιλειφθέντας.
[6] Σωτέλη added by Kaltwasser from *Mor.* 361 F.
[7] ἀπωσθέντας Xylander : ἀπωσθέντα.

[a] Andrews suspects a confusion here and at *Mor.* 730 D

slaughter of none of them. In Leptis,[a] you know, the priests of Poseidon refrain entirely from any sea food, and those initiated into the mysteries at Eleusis hold the surmullet in veneration, while the priestess of Hera at Argos abstains from this fish to pay it honour. For surmullets are particularly good at killing and eating the sea-hare, which is lethal to man.[b] It is for this reason that surmullets possess this immunity, as being friendly and life-saving creatures.

36. Furthermore, many of the Greeks have temples and altars to Artemis Dictynna [c] and Apollo Delphinios; and that place which the god had chosen for himself the poet [d] says was settled by Cretans under the guidance of a dolphin. It was not, however, the god who changed his shape and swam in front of the expedition, as tellers of tales relate; instead, he sent a dolphin to guide the men and bring them to Cirrha.[e] They also relate that Soteles and Dionysius, the men sent by Ptolemy Soter [f] to Sinope to bring back Serapis, were driven against their will by a violent wind out of their course beyond Malea, with the Peloponnesus on their right. When they were lost and discouraged, a dolphin appeared by the

with Lepidotonpolis on the Nile, not far below Thebes, apparently a focal point of a taboo on eating the bynni, allegedly due to its consumption of the private parts of Osiris when they were thrown into the river (*cf. Mor.* 358 B).

[b] *Cf.* Aelian, *De Natura Animal.* ii. 45; ix. 51; xvi. 19; Pliny, *Nat. Hist.* ix. 155; Philostratus, *Vita Apoll.* vi. 32.

[c] As though "Artemis of the Net"; see Callimachus, *Hymn* iii. 198.

[d] Homer, *Hymn to Apollo*, iii. 393 ff. (as restored by van Herwerden). For Delphinian Apollo see lines 495 f.

[e] The port of Delphi.

[f] *Cf. Mor.* 361 F; Tacitus, *Histories*, iv. 83-84.

(984) δελφῖνα πρῴραθεν ὥσπερ ἐκκαλεῖσθαι καθηγούμενον εἰς τὰ ναύλοχα καὶ σάλους[1] μαλακοὺς ἔχοντα τῆς χώρας καὶ[2] ἀσφαλεῖς, ἄχρις οὗ τοῦτον τὸν τρόπον ἄγων καὶ παραπέμπων τὸ πλοῖον εἰς Κίρραν κατέστησεν. ὅθεν ἀναβατήρια[3] θύσαντες, ἔγνωσαν ὅτι δεῖ δυεῖν ἀγαλμάτων τὸ μὲν τοῦ Πλούτωνος ἀνελέσθαι καὶ κομίζειν, τὸ δὲ τῆς Κόρης ἀπομάξασθαι καὶ καταλιπεῖν.

Εἰκὸς μὲν οὖν ἦν καὶ τὸ φιλόμουσον ἀγαπᾶν τοῦ θηρίου τὸν θεόν· ᾧ καὶ Πίνδαρος ἀπεικάζων ἑαυτόν ἐρεθίζεσθαι φησὶν

C ἁλίου[4] δελφῖνος ὑπόκρισιν[5]·
τὸν μὲν ἀκύμονος ἐν[6] πόντου πελάγει
αὐλῶν ἐκίνησ' ἐρατὸν μέλος.

ἀλλὰ μᾶλλον ἔοικε τὸ φιλάνθρωπον αὐτοῦ θεοφιλὲς εἶναι· μόνος γὰρ ἄνθρωπον ἀσπάζεται, καθ' ὃ ἄνθρωπός ἐστι. τῶν δὲ χερσαίων τὰ μὲν οὐδένα τὰ δ' ἡμερώτατα μόνους περιέπει τοὺς τρέφοντας ὑπὸ χρείας, καὶ τοὺς συνήθεις ὁ κύων ὁ ἵππος ὁ ἐλέφας· αἱ δὲ χελιδόνες ὅσων μὲν δέονται τυγχάνουσιν εἰσοικισάμεναι, σκιᾶς καὶ ἀναγκαίας ἀσφαλείας,

[1] σάλους Madvig : στόλους.
[2] καὶ Reiske : εἶναι or καταμένειν.
[3] ἀναβατήρια Reiske : ἀναβατήριον (ἀποβατήρια van Herwerden).
[4] ἁλίου from *Mor.* 704 F Reiske : οὐ.
[5] ὑπόκρισιν Xylander : ἀπόκρισιν.
[6] ἐν Wyttenbach : ὄν, εἰς, or ἐκ.

prow and, as it were, invited them to follow and led them into such parts as had safe roadsteads with but a gentle swell until, by conducting and escorting the vessel in this manner, it brought them to Cirrha. Whence it came about that when they had offered thanksgiving for their safe landing, they came to see that of the two statues they should take away the one of Pluto, but should merely take an impress of that of Persephone and leave it behind.[a]

Well might the god be fond of the music-loving character of the dolphin,[b] to which Pindar [c] likens himself, saying that he is roused

> Like a dolphin of the sea
> Who on the waveless deep of ocean
> Is moved by the lovely sound of flutes.

Yet it is even more likely that its affection for men [d] renders it dear to the gods; for it is the only creature who loves man for his own sake.[e] Of the land animals, some avoid man altogether, others, the tamest kind, pay court for utilitarian reasons only to those who feed them, as do dogs and horses and elephants to their familiars. Martins take to houses to get what they need, darkness and a minimum of security, but

[a] That is, in Sinope.

[b] *Cf. Mor.* 162 F; Pliny, *Nat. Hist.* xi. 137.

[c] Page 597, ed. Sandys (L.C.L.); frag. 125, lines 69-71 ed. Bowra (O.C.T.); frag. 222. 14-17, ed. Turyn. The quotation is found also in *Mor.* 704 F—705 A. The lines were partially recovered in *Oxyrhynchus Papyri*, iii. 408 b (1903); for the critical difficulties see Turyn's edition.

[d] Pliny, *Nat. Hist.* x. 24. For Dionysus and the pirate-dolphins see the seventh *Homeric Hymn* and Frazer on Apollodorus, iii. 5. 3 (L.C.L., vol. i, p. 332).

[e] "The hunting of dolphins is immoral": Oppian, *Hal.* v. 416 (see the whole passage).

(984) φεύγουσι δὲ καὶ φοβοῦνται τὸν ἄνθρωπον ὥσπερ θηρίον. τῷ δὲ δελφῖνι παρὰ πάντα καὶ μόνῳ τὸ ζητούμενον ὑπὸ τῶν ἀρίστων φιλοσόφων ἐκεῖνο, τὸ D φιλεῖν ἄνευ χρείας[1] ὑπάρχει· μηδενὸς γὰρ εἰς μηδὲν ἀνθρώπου δεόμενος πᾶσιν εὐμενής τε φίλος ἐστὶ καὶ βεβοήθηκε πολλοῖς· ὧν τὰ μὲν Ἀρίονος οὐδεὶς ἀγνοεῖ· περιβόητα γάρ ἐστιν· Ἡσιόδου δὲ κατὰ καιρὸν αὐτὸς ἡμᾶς, ὦ φίλε, ἀνέμνησας,

ἀτὰρ οὐ τέλος ἵκεο μύθων.

ἔδει δὲ τὸν κύνα διηγησάμενον[2] μὴ παραλιπεῖν τοὺς δελφῖνας· τυφλὸν γὰρ ἦν τὸ μήνυμα τοῦ κυνός, ὑλακτοῦντος καὶ μετὰ βοῆς ἐπιφερομένου τοῖς φονεῦσιν, εἰ μὴ τὸν νεκρὸν[3] περὶ τὸ Νέμειον θαλάσσῃ διαφερόμενον ἀράμενοι δελφῖνες, ἕτεροι παρ' ἑτέρων ἐκδεχόμενοι προθύμως, εἰς τὸ Ῥίον ἐκθέντες ἔδειξαν ἐσφαγμένον.

E Ἔναλον δὲ τὸν Αἰολέα Μυρσίλος[4] ὁ Λέσβιος ἱστορεῖ, τῆς Σμινθέως[5] ἐρῶντα θυγατρὸς ῥιφείσης κατὰ χρησμὸν τῆς Ἀμφιτρίτης ὑπὸ τῶν Πενθιλιδῶν,[6] καὶ αὐτὸν ἐξαλόμενον[7] εἰς τὴν θάλασσαν ὑπὸ δελφῖνος σῶον ἐξενεχθῆναι πρὸς τὴν Λέσβον.

Ἡ δὲ πρὸς τὸν Ἰασέα παῖδα τοῦ δελφῖνος εὔνοια

[1] χρείας] the mss. follow with the words φύσει πρὸς ἀνθρώπους; deleted by W. C. H.
[2] διηγησάμενον Bernardakis: αἰτησάμενον.
[3] εἰ μὴ τὸν νεκρὸν added by Meziriacus.
[4] Μυρσίλος C. Müller: μυρτίλος.
[5] Σμινθέως Emperius: φινέως.
[6] Πενθιλιδῶν Meziriacus: πενθίδων.
[7] ἐξαλόμενον Reiske: ἐξαλλόμενον.

avoid and fear man as a dangerous wild beast.[a] To the dolphin alone, beyond all others, nature has granted what the best philosophers seek : friendship for no advantage. Though it has no need at all of any man, yet it is a genial friend to all and has helped many. The story of Arion [b] is familiar to everyone and widely known ; and you, my friend, opportunely put us in mind of the tale of Hesiod,[c]

> But you failed to reach the end of the tale.[d]

When you told of the dog, you should not have left out the dolphins, for the information of the dog that barked and rushed with a snarl on the murderers would have been meaningless if the dolphins had not taken up the corpse as it was floating on the sea near the Nemeon [e] and zealously passed it from group to group until they put it ashore at Rhium and so made it clear that the man had been stabbed.

Myrsilus [f] of Lesbos tells the tale of Enalus the Aeolian who was in love with that daughter of Smintheus who, in accordance with the oracle of Amphitrite, was cast into the sea by the Penthilidae, whereupon Enalus himself leaped into the sea and was brought out safe on Lesbos by a dolphin.

And the goodwill and friendship of the dolphin for

[a] *Cf. Mor.* 728 A ; but see Aelian, *De Natura Animal.* i. 52 ; Arrian, *Anabasis*, i. 25. 8.

[b] Herodotus, i. 24 ; Mair on Oppian, *Hal.* v. 448. In *Mor.* 161 A ff. the story is told by an eye-witness at the banquet of the Seven Wise Men.

[c] *Cf.* 969 E *supra.*

[d] Homer, *Iliad*, ix. 56.

[e] The shrine of Zeus at Oeneon in Locris.

[f] Müller, *Frag. Hist. Graec.* iv, p. 459 ; Jacoby, *Frag. d. griech. Hist.* ii, frag. 12 ; *cf. Mor.* 163 B-D ; Athenaeus, 466 C gives as his authority Anticleides.

(984) καὶ φιλία δι' ὑπερβολὴν ἔρως ἔδοξε· συνέπαιζε γὰρ αὐτῷ καὶ συνενήχετο καθ' ἡμέραν καὶ παρεῖχεν ἐν χρῷ ψαυόμενος· ἔπειτα περιβαίνοντος οὐκ ἔφευγεν, ἀλλ' ἔφερε χαίρων, πρὸς ὃ ἔκαμπτε κλίνων, ὁμοῦ πάντων Ἰασέων ἑκάστοτε συντρεχόντων ἐπὶ τὴν θάλατταν. ὄμβρου δέ ποτε πολλοῦ μετὰ χαλάζης
F ἐπιπεσόντος, ὁ μὲν παῖς ἀπορρυεὶς ἐξέλιπεν, ὁ δὲ δελφὶν ὑπολαβὼν ἅμα τῷ νεκρῷ συνεξέωσεν αὑτὸς ἑαυτὸν ἐπὶ τὴν γῆν καὶ οὐκ ἀπέστη τοῦ σώματος ἕως ἀπέθανε, δικαιώσας μετασχεῖν ἧς συναίτιος ἔδοξε γεγονέναι τελευτῆς. καὶ τοῦ πάθους ἐπίσημον Ἰασεῦσι τὸ χάραγμα τοῦ νομίσματός ἐστι, παῖς ὑπὲρ δελφῖνος ὀχούμενος.

Ἐκ δὲ τούτου καὶ τὰ περὶ Κοίρανον ὄντα μυθώδη
985 πίστιν ἔσχε. Πάριος γὰρ ὢν τὸ γένος ἐν Βυζαντίῳ δελφίνων βόλον, ἐνσχεθέντων σαγήνῃ καὶ κινδυνευόντων κατακοπῆναι, πριάμενος μεθῆκε πάντας· ὀλίγῳ δ' ὕστερον ἔπλει πεντηκόντορον ἔχων, ὥς φασι, λῃστῶν[1] πεντήκοντα[2] ἄγουσαν· ἐν δὲ τῷ μεταξὺ Νάξου καὶ Πάρου πορθμῷ τῆς νεὼς ἀνατραπείσης καὶ τῶν ἄλλων διαφθαρέντων, ἐκεῖνον λέγουσι, δελφῖνος ὑποδραμόντος αὐτῷ καὶ ἀνακου-

[1] λῃστῶν] λῃστὰς Meziriacus ; Μιλησίων Rohde.
[2] πεντήκοντα (= ν′) Naber, after Reiske : ἄνδρας.

[a] Aelian, *De Natura Animal.* vi. 15 (*cf.* viii. 11), tells the story in great detail and with several differences ; *cf.* also the younger Pliny's famous letter (ix. 33) on the dolphin of Hippo and the vaguer accounts in Aelian, *De Natura Animal.* ii. 6 ; Antigonus, 55 ; Philo, 67 (p. 132). Gulick on Athenaeus, 606 c-d collects the authorities ; see also the dolphin stories in Pliny, *Nat. Hist.* ix. 25 ff. and Mair on Oppian,

the lad of Iasus [a] was thought by reason of its greatness to be true love. For it used to swim and play with him during the day, allowing itself to be touched; and when the boy mounted upon its back, it was not reluctant, but used to carry him with pleasure wherever he directed it to go, while all the inhabitants of Iasus flocked to the shore each time this happened. Once a violent storm of rain and hail occurred and the boy slipped off and was drowned. The dolphin took the body and threw both it and itself together on the land and would not leave until it too had died, thinking it right to share a death for which it imagined that it shared the responsibility. And in memory of this calamity the inhabitants of Iasus have minted their coins with the figure of a boy riding a dolphin.[b]

From this the wild tales about Coeranus [c] gained credence. He was a Parian by birth who, at Byzantium, bought a draught of dolphins which had been caught in a net and were in danger of slaughter, and set them all free. A little later he was on a sea voyage in a penteconter, so they say, with fifty pirates aboard; in the strait between Naxos and Paros the ship capsized and all the others were lost, while Coeranus, they relate, because a dolphin sped beneath him and buoyed him up, was put ashore at

Hal. v. 458; Thompson, *Glossary*, pp. 54 f. Iasus is a city in Ionian Caria on the gulf of the same name.

[b] The story has a happier ending in one version found in Pliny, *Nat. Hist.* ix. 27: the dolphin dies, but Alexander the Great makes the boy head of the priesthood of Poseidon in Babylon.

[c] Aelian, *De Natura Animal.* viii. 3; Athenaeus, 606 e-f cites from Phylarchus, Book XII (Jacoby, *Frag. d. griech. Hist.* i, p. 340). There are many other examples of dolphins rescuing people, such as the fragment of Euphorion in Page, *Greek Literary Papyri*, i, p. 497 (L.C.L.).

(985) φίζοντος, ἐξενεχθῆναι τῆς Σικίνου[1] κατὰ σπήλαιον, ὃ δείκνυται μέχρι νῦν καὶ καλεῖται Κοιράνειον· ἐπὶ τούτῳ δὲ λέγεται ποιῆσαι τὸν Ἀρχίλοχον

πεντήκοντ' ἀνδρῶν λίπε Κοίρανον ἤπιος Ποσειδῶν.

B ἐπεὶ δ' ὕστερον ἀποθανόντος αὐτοῦ τὸ σῶμα πλησίον τῆς θαλάττης οἱ προσήκοντες ἔκαον, ἐπεφαίνοντο πολλοὶ δελφῖνες παρὰ τὸν αἰγιαλόν, ὥσπερ ἐπιδεικνύντες ἑαυτοὺς ἥκοντας ἐπὶ τὰς ταφάς, καὶ παραμείναντες ἄχρι οὗ συνετελέσθησαν.

Ἡ δ' Ὀδυσσέως ἀσπὶς ὅτι μὲν ἐπίσημον εἶχε δελφῖνα καὶ Στησίχορος ἱστόρηκεν· ἐξ ἧς δ' αἰτίας, Ζακύνθιοι διαμνημονεύουσιν, ὡς Κριθεὺς μαρτυρεῖ· νήπιος γὰρ ὢν ὁ Τηλέμαχος, ὥς φασιν, εἰς ἀγχιβαθὲς τῆς θαλάττης ὀλισθὼν ἐσώθη, δελφίνων ὑπολαβόντων καὶ ἀνανηξαμένων· ὅθεν ἐποιήσατο γλυφὴν τῇ σφραγῖδι καὶ τῆς ἀσπίδος κόσμον ὁ πατήρ,
C ἀμειβόμενος τὸ ζῷον.

Ἀλλ' ἐπεὶ προειπὼν ὡς οὐδὲ μῦθον ὑμῖν ἐρῶ καὶ αὐτὸς οὐκ οἶδ' ὅπως πρὸς τοῖς δελφῖσιν ἔλαθον πορρωτέρω τοῦ πιθανοῦ συνεξοκείλας εἰς τὸν Ὀδυσσέα καὶ Κοίρανον, ἐπιτίθημι δίκην ἐμαυτῷ· παύομαι γὰρ ἤδη λέγων.

37. ΑΡΙΣΤ. Ἔξεστιν οὖν ὑμῖν, ὦ ἄνδρες δικασταί, τὴν ψῆφον φέρειν.

[1] Σικίνου Palmerius (*cf.* Cobet, *Coll. Crit.* p. 539): Σικύνθου (said to be an ancient name of Paros).

[a] An island south of Paros.
[b] *Cf.* Edmonds, *Elegy and Iambus*, ii, p. 321 (L.C.L.).

Sicinus,[a] near a cave which is pointed out to this day and bears the name of Coeraneum.[b] It is on this man that Archilochus is said to have written the line

> Out of fifty, kindly Poseidon left only Coeranus.[c]

When later he died, his relatives were burning the body near the sea when a large shoal of dolphins appeared off shore as though they were making it plain that they had come for the funeral, and they waited until it was completed.[d]

That the shield of Odysseus had a dolphin emblazoned on it, Stesichorus[e] also has related; and the Zacynthians perpetuate the reason for it, as Critheus[f] testifies. For when Telemachus was a small boy, so they say, he fell into the deep inshore water and was saved by dolphins who came to his aid and swam with him to the beach; and that was the reason why his father had a dolphin engraved on his ring and emblazoned on his shield, making this requital to the animal.

Yet since I began by saying that I would not tell you any tall tales and since, without observing what I was up to, I have now, besides the dolphins, run aground on both Odysseus and Coeranus to a point beyond belief, I lay this penalty upon myself: to conclude here and now.

37. ARISTOTIMUS.[g] So, gentlemen of the jury, you may now cast your votes.

[c] Edmonds, *op. cit.* ii, p. 164; Diehl, *Anth. Lyrica*, i, p. 243, frag. 117.

[d] On the grief of dolphins see Pliny, *Nat. Hist.* ix. 25, 33.

[e] Edmonds, *Lyra Graeca*, ii, p. 66, frag. 71.

[f] Nothing whatever is known about this author, whose name may be given incorrectly in our MSS.

[g] Perhaps rather Heracleon (975 C) or Optatus (965 D).

(985) ΣΩΚΛ. Ἀλλ' ἡμῖν γε πάλαι τὸ τοῦ Σοφοκλέους δεδογμένον ἐστίν·

εὖ γὰρ καὶ διχοστατῶν λόγος
σύγκολλά τ' ἀμφοῖν ἐς μέσον[1] τεκταίνεται.

ταυτὶ γάρ, ἃ πρὸς ἀλλήλους εἰρήκατε, συνθέντες εἰς ταὐτὸν ἀμφότεροι καλῶς ἀγωνιεῖσθε κοινῇ πρὸς τοὺς τὰ ζῷα λόγου καὶ συνέσεως ἀποστεροῦντας.

[1] *σύγκολλά τ' ἀμφοῖν ἐς μέσον* Brunck and Porson : *συγκολλᾶτ' ἐς μέσον ἀμφοῖν.*

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[a] Nauck, *Trag. Graec. Frag.* p. 314, frag. 783 ; Pearson, iii, p. 69, frag. 867.
[b] The Stoics, as always in this essay.

SOCLARUS. As for us, we have for some time held the view of Sophocles [a]:

> It is a marvel how of rival sides
> The strife of tongues welds both so close together.

For by combining what you have said against each other, you will together put up a good fight against those [b] who would deprive animals of reason and understanding.[c]

[c] To some critics the ending is suspicious because of its brevity and vagueness; they regard it as added by an ancient editor who could not find the original termination. But the sudden turn at the end may merely indicate that the whole debate is in reality a single argument to prove the thesis that animals do have some degree of rationality (see also the Introduction to this dialogue).

APPENDIX

A word of caution is needed : Plutarch emphatically was no naturalist. The zoological material is a hodge-podge of misinformation dredged up from various zoological sources, seasoned here and there with personal contributions, which are not necessarily correct. In the original sources, terms for specific types of animals were probably used with considerable precision. It is my impression that Plutarch often had only a vague idea of the meaning of such terms. For example, he consistently uses the specific term for a rock dove, but probably had in mind any type of domestic dove. Similarly, *dorcas* was used in Greece commonly as a term for the roedeer, but in Asia Minor for the common gazelle. In the original sources the word probably denoted specifically one or the other, depending on where the man lived ; but Plutarch may well have used the term vaguely for any type of small deer, including gazelles and antelopes.

Alfred C. Andrews

CLASSIFIED ZOOLOGICAL INDEX

1. Mammals

Αἴλουρος: wild cat of Egypt (*Felis ocreata* Gm.) and of Europe (*F. silvestris* Schreb.) and domestic form (*F. domestica* Briss.).

Αἴξ: domestic goat, *Capra hircus* L.

Ἀλώπηξ: fox, esp. *Vulpes vulgaris* Flem.

Ἄρκτος: bear, more esp. the European brown bear, *Ursus arctos* L.

Βοῦς: domestic ox, *Bos taurus* L.

Γαλέη (γαλῆ): the weasel (*Putorius vulgaris* Cuv.), and such similar animals as the marten (*Martes* sp.) and the polecat or foumart (*Mustela putorius* L.).

Δασύπους: hare (see Λαγωός).

Δελφίς: dolphin, esp. *Delphinus delphis* L.

Δορκάς: in Greece, usually a term for the roedeer, *Capreolus capreolus* L.; in Asia Minor, usually a term for the common gazelle, *Gazella dorcas* L.

Ἔλαφος: in Greece, usually a term for the red-deer, *Cervus elaphus* L.; in Ionia, usually a term for the fallow-deer, *C. dama* L.

Ἐλέφας: elephant, *Elephas indicus* L. and *E. africanus* Blumenb.

Ἔριφος: usually a kid (see Αἴξ); sometimes a very young lamb (see Ὄϊς).

Ἐχῖνος (χερσαῖος): common hedgehog, *Erinaceus europaeus* L.

Ἡμίονος: mule, usually by mare and he-ass, sometimes by stallion and she-ass; in Syria, a term for the wild ass (*Asinus onager* Sm.) or the dschigetai (*A. hemionus* Sm.).

Ἵππος: horse, *Caballus caballus* L.

Ἵππος ποτάμιος: hippopotamus, *Hippopotamus amphibius* L.

Ἰχνεύμων: ichneumon, *Herpestes ichneumon* L.

Κάμηλος: the Bactrian camel, *Camelus bactrianus* L., and the Arabian camel or dromedary, *C. dromedarius* L.

Κάπρος: wild boar, mostly *Sus scrofa ferus* Rütimeyer.

Κῆτος: in Plutarch usually whale, as in 980 F. See also Κῆτος under Fishes.
Κριός: ram (see Ὄϊς).
Κύων: dog, *Canis familiaris* L.
Λαγωός: hare, esp. the common European hare (*Lepus europaeus* Pall.), to a lesser degree the variable hare (*L. timidus* L.).
Λέων: lion, *Felis leo* L.
Λύγξ: lynx, *Lynx lynx* L.; caracal, *Lynx caracal* Güld.
Λύκος: wolf, *Canis lupus* L.
Ὄϊς: domestic sheep, *Ovis aries* L.
Ὄνος: domestic ass, *Asinus domesticus* Sm.
Ὀρεύς: mule (see Ἡμίονος).
Ὄρυξ: chiefly the scimitar-horned oryx (*Oryx leucoryx* Pall.) and the straight-horned oryx (*O. beisa* Rüppel).
Πάρδαλις: panther or leopard, *Felis pardus antiquorum* Smith.
Πρόβατον: sheep (see Ὄϊς).
Σῦς: pig, *Sus scrofa domesticus* Rütimeyer.
Ταῦρος: bull (see Βοῦς).
Τίγρις: tiger, *Felis tigris* L.
Φώκη: seal, including the common seal (*Phoca vitulina* L.) and the monk seal (*P. monachus* Herm.).

2. Birds

Ἀετός: eagle, esp. *Aquila* sp.
Ἀηδών: nightingale, chiefly *Luscinia megarhyncha* Brehm.
Ἀλεκτρυών: domestic cock, *Gallus domesticus* Briss.
Ἀλκυών: kingfisher, *Alcedo ispida* L.
Γέρανος: common crane, *Grus grus* L.
Ἐρωδιός: heron, including the common heron (*Ardea cinerea* L.), the greater European egret (*Herodias alba* Gray), the lesser European egret (*Garzetta garzetta* L.), and the bittern (*Botaurus stellaris* L.).
Ἶβις: ibis, including the sacred white ibis (*Ibis aethiopica* Ill.) and the black ibis (*Plegades falcinellus* Kaup.).
Ἱέραξ: smaller hawks and falcons generically.
Ἰκτῖνος: kite, including the common kite (*Milvus ictinus* Sav.) and the black kite (*M. ater* Gm.).
Κίττα: jay, *Garrulus glandarius* L.; sometimes the magpie, *Pica caudata* L.
Κολοιός: jackdaw, *Corvus monedula* L.

Κόραξ: raven, *Corvus corax* L.
Κορώνη: crow (*Corvus corone* L.) and hooded crow (*C. cornix* L.).
Κύκνος: swan, *Cygnus olor* Gm. and *C. musicus* Bkst.
Μέροψ: bee-eater, *Merops apiaster* L.
Πελαργός: stork, esp. *Ciconia alba* L.
Πέρδιξ: partridge, esp. the Greek partridge, *Alectoris graeca* Kaup; in Italy also the red-legged partridge, *A. rufa* Kaup.
Περιστερά: rock-dove, *Columba livia* L.; domestic rock-dove, *C. livia domestica* L.
Τροχίλος: Egyptian plover, *Pluvianus aegyptius* Viell.; elsewhere also the common European wren, *Troglodytes troglodytes* L.
Χελιδών: swallow, including the chimney swallow (*Chelidon rustica* L.) and the house-martin (*Chelidon urbica* Boie).
Χήν: as a wild type, the gray or graylag goose (*Anser cinereus* Meyer) and the bean goose (*Anser segetum* Bonn.), often the domestic type of the gray goose.
Ψάρ: starling, *Sturnus vulgaris* L.
Ψιττακός: parrot, perhaps esp. *Psittacus alexandri* L. and *P. torquatus* Gm.
Ὠτίς: bustard, *Otis tarda* L.
Ὦτος: a horned or eared owl, not more specifically identifiable.

3. Reptiles and Amphibia

Βάτραχος: frog, *Rana* sp. and allied genera.
Κροκόδειλος: Nile crocodile, *Crocodilus niloticus* Laur.
Ὄφις: serpent generically.
Χαμαιλέων: the African chameleon, *Chameleo vulgaris* Latr.
Χελώνη (χερσαία): tortoise, *Testudo graeca* L. and *T. marginata* Schoepff.; (θαλαττία): sea-turtle, *Thalassochelys corticata* Rondel.

4. Fishes

Ἁλιεύς: fishing-frog, *Lophius piscatorius* L.
Ἀλώπηξ: fox-shark, *Alopecias vulpes* Bp.
Ἀμία: bonito, more esp. the pelamid or belted bonito, *Sarda sarda* Cuv., to a lesser degree the bonito or striped-bellied tunny, *Katsuwonus pelamis* Kish.
Ἀνθίας: in 977 c probably the Mediterranean barbier, *Serranus anthias* C.V.; sometimes spoken of as a much larger fish, then of uncertain identity.

Βελόνη: usually the pipefish (*Syngnathus rubescens* Risso and *S. acus* L.) and the garfish (*Belone imperialis* Vincig. and *Strongylura acus* Lacép.); in 983 c indeterminable.

Γαλεός: generic term for sharks and dogfishes, more esp. *Scyllium canicula* Cuv., *S. catulus* Cuv., and *Mustelus vulgaris* Müll.

Γαλῆ: principally the hake and rockling, *Phycis* sp. and *Motella* sp.

Γόγγρος: conger-eel, *Conger vulgaris* Cuv.

Ἔλλοψ: probably mostly the common sturgeon, *Acipenser sturio* L.

Ἡγεμών: usually the pilot-fish, *Naucrates ductor* Cuv.; in 980 F apparently also one of the globe-fishes, such as *Diodon hystrix* L.

Θρίσσα: probably the shad, *Alosa vulgaris* C.V., or the sardinelle, *Sardinella aurita* C.V.

Θύννος: tunny, mostly the common tunny, *Thunnus thynnus* L.

Ἱερός: "sacred," an epithet applied to several fish, more especially the ἀνθίας, the gilthead, the sturgeon, the dolphin, and the pilot-fish.

Ἰουλίς: rainbow-wrasse, *Coris iulis* Gth.

Κεστρεύς: the gray mullet in general, sometimes the common gray mullet, *Mugil capito* Cuv., in particular.

Κῆτος: sometimes a large sea monster (as in 981 D), in other authors sometimes a huge fish (such as a large tunny), but more commonly, and usually in Plutarch, a whale.

Κολίας: coly-mackerel, *Pneumatophorus colias* Gm.

Κωβιός: goby, chiefly the black goby, *Gobius niger* L.

Λάβραξ: sea-bass, *Labrax lupus* Cuv.

Μορμύρος: type of sea bream, the mormyrus, *Pagellus mormyrus* C.V.

Μύραινα: moray or murry, *Muraena helena* L.

Νάρκη: torpedo or electric ray, esp. *Torpedo marmorata* Risso, less commonly *T. narce* Nardo and *T. hebetans* Löwe.

Περαίας: a type of gray mullet (*Mugil* sp.).

Πηλαμύς: year-old tunny (see Θύννος).

Σαργός: sargue, esp. *Sargus vulgaris* Geoff.

Σκάρος: parrot-fish, *Scarus cretensis* C.V.

Σκορπίος: sculpin, *Scorpaena scrofa* L. and *S. porcus* L.

Τρίγλα: the red or plain surmullet, *Mullus barbatus* L., and the striped or common surmullet, *M. surmuletus* L.

Φυκίς : a wrasse, probably specifically *Crenilabrus pavo* C.V.
Χρυσωπός : gilthead, *Chrysophrys aurata* C.V.

5. Molluscs

Κόγχη : mussels in general, including oysters.
Λαγωός (θαλάττιος) : sea-hare, *Aplysia depilans* L.
Ὄστρεον : sometimes a generic term for mussels; more commonly a specific term for the common European oyster, *Ostrea edulis* L.; occasionally a term for other species of oyster, such as *O. lamellosa* Brocchi and *O. cristata* Lam.
Πίννη : pinna, especially *Pinna nobilis* L.; but also *P. rudis* L., *P. rotundata* L., and *P. pectinata* L.
Πολύπους : octopus, *Octopus vulgaris* Lam.
Πορφύρα : purplefish, *Murex trunculus* L., *M. brandaris* L., and *Thais haemastoma* Lam.
Σηπία : cuttlefish, *Sepia officinalis* L.

6. Crustacea

Κάραβος : rock lobster, *Palinurus vulgaris* Latr.
Καρκίνος : crab, Decapoda brachyura Lam.
Πάγουρος : probably the common edible crab, *Cancer pagurus* L.
Πιννοτήρης : pinna-guard, *Pinnoteres veterum* L.
Σπογγοτήρης : sponge-guard, *Typton spongicola* Costa.

7. Insects and Spiders

Ἀράχνης : spider (class Arachnoidea, order Araneida).
Μέλιττα : bee generically, but mostly domestic honeybee, *Apis mellifera* L.
Μύρμηξ : ant generically (family Formicidae).
Τέττιξ : cicada, esp. *Cicada plebeia* Scop. and *C. orni* L.

8. Echinoderms

Ἀστήρ : starfish generically, *Asterias* sp.
Ἐχῖνος (θαλάττιος) : sea-urchin, especially *Echinus esculentus* Lam. and *Strongylocentrotus lividus* Brdt.

9. Porifera

Σπόγγος : sponge, chiefly *Euspongia officinalis* Bronn. and *Hippospongia equina* Schmidt.

BEASTS ARE RATIONAL

(BRUTA ANIMALIA RATIONE UTI)

INTRODUCTION

Many will find this little *jeu d'esprit* as pleasant reading as anything in Plutarch. In part, this may be due to its (perhaps accidental) brevity; but its originality and freshness are undeniable. These qualities have, to be sure, puzzled a number of scholars who are still disputing whether the sources are principally Epicurean or Peripatetic or Cynic. Nothing quite like it is known elsewhere,[a] which sad lack baffles the *Quellenforscher*. So, rather than allow a touch of spontaneous imagination to Plutarch, it has been confidently asserted that the dialogue must come from the school of Menippus, or be an attempt to turn the tables on Polystratus, and so on.

Everything must have a source (if only the author's ingenuity) and the source here, so far as it can be predicated with any certainty, is the tenth book of the *Odyssey* seen through the humorous eyes of a young Boeotian.[b] We have here, then, a Boeotian

[a] But talking animals were not new (Hirzel, *Der Dialog*, i, p. 338 f.).

[b] So the sensible Hirzel (*op. cit.* ii, p. 131); see also Hartman, *De Plutarcho*, p. 576. Stylometry, however, does not encourage the view that this is an early work (Sandbach, *Class. Quart.* xxxiii, p. 196).

pig instructing the favourite of Athena.[a] It was once fashionable to assert, or imply, that since Plutarch was once a young Boeotian himself, matters could not be so simple, nor could he be the author. But the climate of scholarship is, perhaps, changing. There are few of Plutarch's admirers who will not claim this lively work for one of his more admirable achievements, written, perhaps, when he was quite young.

Even if the authorship is accepted without hesitation, there is little else that is certain except that the Stoics are constantly under attack, though rather less directly than in the preceding dialogue. There is grave doubt about the title: is it no. 127 or no. 135 in the Lamprias Catalogue? Or, as it has become popular to call it, is it really the *Gryllus*? [b] There are a number of troublesome lacunae; the work, as it stands, ends suddenly with a gay witticism instead of being continued to a more conventional termination.[c] It is only too likely that the more mature Plutarch would have gone on and on; but what would the clever young man who concocted this conceit have done? [d]

For once, there is a good translation, or paraphrase, the German one of Bruno Snell in his *Plutarch*

[a] Plutarch actually quotes the proverb in his *Life of Demosthenes*, xi. 5 (851 B) and *Mor.* 803 D, but does not seem to realize its possible application here. See the note on 995 F *infra*.

[b] Ziegler (*RE*, *s.v.* "Plutarchos," 743) says that *Gryllus* is impossible in spite of the Platonic examples, but appears to admit *Ammonius* (no. 84 in the Lamprias Catalogue).

[c] See the last note on 992 E *infra*.

[d] Curiously enough, Xenophon is the most famous son of the historical Gryllus and he is said to have been once a prisoner in Boeotia (Philostratus, *Vit. Soph.* 12).

(Zürich, 1948), though this version gives almost too exciting an impression of vivacity and wit by omitting the more tiresome sections.

Those interested in Gryllus' remarks on the indecent ways in which men pervert animals to their taste will find a sympathetic exposition in E. G. Boulenger's *Animal Mysteries* (London, 1927).

ΠΕΡΙ ΤΟΥ ΤΑ ΑΛΟΓΑ ΛΟΓΩΙ ΧΡΗΣΘΑΙ

ΟΔΥΣΣΕΥΣ, ΚΙΡΚΗ, ΓΡΥΛΛΟΣ

(985) D 1. ΟΔΥΣΣΕΥΣ. Ταῦτα μέν, ὦ Κίρκη, μεμαθηκέναι δοκῶ καὶ διαμνημονεύσειν· ἡδέως δ' ἄν[1] σου πυθοίμην, εἴ τινας ἔχεις Ἕλληνας ἐν τούτοις, οὓς λύκους καὶ λέοντας ἐξ ἀνθρώπων πεποίηκας.

E ΚΙΡΚΗ. Καὶ πολλούς, ὦ ποθούμεν' Ὀδυσσεῦ. πρὸς τί δὲ τοῦτο ἐρωτᾷς;

ΟΔ. Ὅτι νὴ Δία καλήν ἄν μοι δοκῶ γενέσθαι φιλοτιμίαν πρὸς τοὺς Ἕλληνας, εἰ χάριτι σῇ[2] λαβὼν τούτους, αὖθις εἰς[3] ἀνθρώπους ἑταίρους ἀνασώσαιμι καὶ μὴ περιίδοιμι καταγηράσαντας παρὰ φύσιν ἐν σώμασι θηρίων, οἰκτρὰν καὶ ἄτιμον οὕτω δίαιταν ἔχοντας.

ΚΙΡ. Οὗτος ὁ ἀνὴρ οὐχ αὑτῷ μόνον οὐδὲ τοῖς ἑταίροις, ἀλλὰ τοῖς μηδὲν προσήκουσιν οἴεται δεῖν ὑπ' ἀβελτερίας συμφορὰν γενέσθαι τὴν αὑτοῦ φιλοτιμίαν.

ΟΔ. Ἕτερον αὖ τινα τοῦτον, ὦ Κίρκη, κυκεῶνα λόγων ταράττεις καὶ ὑποφαρμάττεις, ἐμὲ γοῦν ἀτε-

[1] δ' ἄν] δὲ κἄν?
[2] σῇ] missing in some mss.; τῇ σῇ?
[3] εἰς added by Dübner.

BEASTS ARE RATIONAL

(The speakers in the dialogue are Odysseus, Circe, and Gryllus.)

1. ODYSSEUS. These facts,[a] Circe, I believe I have learned and shall not forget them ; yet I should be happy to learn from you further whether there are any Greeks among those whom you have changed from the shape of men into wolves and lions.

CIRCE. Quite a few, beloved Odysseus. But what is your reason for asking this question ?

ODYSSEUS. It is, I swear, because it would bring me noble glory among the Greeks if by your favour I should restore comrades of mine to their original humanity and not allow them to grow old in the unnatural guise of beasts, leading an existence that is so piteous and shameful.

CIRCE. Here's a lad who finds it appropriate that not only himself and his companions, but even total strangers should, through his stupidity, find his ambition their ruin.

ODYSSEUS. This is a new potion [b] of words that you are stirring and drugging for me, Circe. It will cer-

[a] For the beginning *cf.* Horace, *Sat.* ii. 5. 1 :

"Haec quoque, Teresia, praeter narrata . . .,"

a form which is assumed to go back to Menippus.

[b] By which she transformed men into beasts : *Odyssey*, x. 236.

(985) F χνῶς ποιοῦσα θηρίον, εἰ πείσομαί σοι ὡς συμφορά ἐστιν[1] ἄνθρωπον ἐκ θηρίου γενέσθαι.

ΚΙΡ. Οὐ γὰρ ἤδη τούτων ἀτοπώτερα πεποίηκας σεαυτόν, ὃς τὸν ἀθάνατον καὶ ἀγήρω σὺν ἐμοὶ βίον ἀφεὶς ἐπὶ γυναῖκα θνητήν, ὡς δ' ἐγώ φημι, καὶ γραῦν ἤδη διὰ μυρίων ἔτι κακῶν σπεύδεις,
986 ὡς δὴ[2] περίβλεπτος ἐκ τούτου καὶ ὀνομαστὸς ἔτι μᾶλλον ἢ νῦν γενόμενος,[3] κενὸν ἀγαθὸν καὶ εἴδωλον ἀντὶ τῆς ἀληθείας διώκων;

ΟΔ. Ἐχέτω ταῦτα ὡς λέγεις, ὦ Κίρκη· τί γὰρ δεῖ πολλάκις ζυγομαχεῖν ἡμᾶς περὶ τῶν αὐτῶν; τούτους δέ μοι δὸς ἀναλύσασα καὶ χάρισαι τοὺς ἄνδρας.

ΚΙΡ. Οὐχ οὕτω γ' ἁπλῶς, μὰ τὴν Ἑκάτην· οὐ γὰρ οἱ τυχόντες εἰσίν· ἀλλ' ἐροῦ πρῶτον αὐτούς, εἰ θέλουσιν· ἂν δὲ μὴ φῶσι, διαλεχθείς, ὦ γενναῖε, πεῖσον· ἐὰν δὲ μὴ πείσῃς, ἀλλὰ καὶ περιγένωνται διαλεγόμενοι, ἱκανὸν ἔστω σοι περὶ σεαυτοῦ καὶ τῶν φίλων κακῶς βεβουλεῦσθαι.

B ΟΔ. Τί μου καταγελᾷς, ὦ μακαρία; πῶς γὰρ ἂν ἢ δοῖεν οὗτοι λόγον ἢ λάβοιεν, ἕως ὄνοι καὶ σύες καὶ λέοντές εἰσι;

ΚΙΡ. Θάρρει, φιλοτιμότατ' ἀνθρώπων· ἐγώ σοι παρέξω καὶ συνιέντας αὐτοὺς καὶ διαλεγομένους· μᾶλλον δ' εἷς ἱκανὸς ἔσται καὶ διδοὺς καὶ λαμβάνων ὑπὲρ πάντων λόγον· ἰδού, τούτῳ διαλέγου.

[1] ἐστιν] γ' ἐστιν ?
[2] δὴ] ἂν Bernardakis.
[3] γενόμενος] γενησόμενος Hartman.

[a] Hecate, goddess of black magic, who was invoked for

tainly transform me literally into a beast if I am to take your word for it that changing from beast to man spells ruin.

CIRCE. Haven't you already worked a stranger magic than this on yourself? You who refused an ageless, immortal life at my side and would struggle through a thousand new dangers to a woman who is mortal and, I can assure you, no longer so very young—and this for no object other than to make yourself more gaped at and renowned than you already are, pursuing an empty phantom instead of what is truly good.

ODYSSEUS. All right, let it be as you say, Circe. Why must we quarrel again and again about the same matters? Now please just grant me the favour of letting the men go free.

CIRCE. By the Black Goddess,[a] it's not so simple as that. These creatures are no run of the mill. You must ask them first if they are willing. If they say no, my hero, you'll have to argue with them and convince them. And if you don't, and they win the argument, then you must be content with having exercised poor judgement about yourself and your friends.

ODYSSEUS. Dear lady, why are you making fun of me? How can they argue with me or I with them so long as they are asses and hogs and lions?

CIRCE. Courage, courage, my ambitious friend. I'll see to it that you shall find them both receptive and responsive. Or rather, one of the number will be enough to thrust and parry for them all. Presto! You may talk with this one.

such functions at least from the time of Euripides' *Medea* (394 ff.).

(986) ΟΔ. Καὶ τίνα τοῦτον, ὦ Κίρκη, προσαγορεύσομεν; ἢ τίς ἦν οὗτος ἀνθρώπων;

ΚΙΡ. Τί γὰρ τοῦτο πρὸς τὸν λόγον; ἀλλὰ κάλει αὐτόν, εἰ βούλει, Γρύλλον. ἐγὼ δ' ἐκστήσομαι ὑμῖν, μὴ καὶ παρὰ γνώμην ἐμοὶ δοκῇ χαριζόμενος διαλέγεσθαι.

C 2. ΓΡΥΛΛΟΣ. Χαῖρε, Ὀδυσσεῦ.

ΟΔ. Καὶ σὺ νὴ Δία, Γρύλλε.

ΓΡ. Τί βούλει ἐρωτᾶν;

ΟΔ. Ἐγὼ γινώσκων[1] ὑμᾶς ἀνθρώπους γεγονότας οἰκτείρω μὲν ἅπαντας οὕτως ἔχοντας, εἰκὸς δέ μοι μᾶλλον διαφέρειν ὅσοι Ἕλληνες ὄντες εἰς ταύτην ἀφῖχθε τὴν δυστυχίαν· νῦν οὖν ἐποιησάμην τῆς Κίρκης δέησιν ὅπως τὸν βουλόμενον ὑμῶν ἀναλύσασα καὶ καταστήσασα πάλιν εἰς τὸ ἀρχαῖον εἶδος ἀποπέμψῃ μεθ' ἡμῶν.

ΓΡ. Παῦε, Ὀδυσσεῦ, καὶ περαιτέρω μηδὲν εἴπῃς· ὡς καὶ σοῦ πάντες ἡμεῖς καταφρονοῦμεν, ὡς μάτην ἄρα δεινὸς ἐλέγου καὶ τῷ φρονεῖν πολὺ
D τῶν ἄλλων ἀνθρώπων ἐδόκεις διαφέρειν, ὃς αὐτὸ τοῦτ' ἔδεισας, τὴν μεταβολὴν ἐκ χειρόνων εἰς ἀμείνω, μὴ σκεψάμενος· ὡς γὰρ[2] οἱ παῖδες τὰ φάρμακα τῶν ἰατρῶν φοβοῦνται, καὶ τὰ μαθήματα[3] φεύγουσιν, ἃ μεταβάλλοντα ἐκ νοσερῶν καὶ ἀνοήτων ὑγιεινοτέρους καὶ φρονιμωτέρους ποιοῦσιν αὐτούς, οὕτω σὺ διεκρούσω τὸ ἄλλος ἐξ ἄλλου γενέσθαι, καὶ νῦν αὐτός τε φρίττων καὶ ὑποδει-

[1] γινώσκων Jannotius: γινώσκω.
[2] ὡς γὰρ Wyttenbach: ὥσπερ.
[3] μαθήματα Stephanus: παθήματα.

ODYSSEUS. And how am I to address him, Circe? Who in the world was he? [a]

CIRCE. What's that to do with the issue? Call him Gryllus,[b] if you like. I'll retire now to avoid any suggestion that he is arguing against his own convictions to curry favour with me.

2. GRYLLUS. Hello, Odysseus.

ODYSSEUS. And you too, Gryllus, for heaven's sake!

GRYLLUS. What do you want to ask?

ODYSSEUS. Since I am aware that you have been men, I feel sorry for all of you in your present plight; yet it is only natural that I should be more concerned for those of you who were Greeks before you fell into this misfortune. So now I have asked Circe to remove the spell from any Greek who chooses and restore him to his original shape and let him go back home with us.

GRYLLUS. Stop, Odysseus! Not a word more! You see, we don't any of us think much of you either, for evidently it was a farce, that talk of your cleverness and your fame as one whose intelligence far surpassed the rest—a man who boggles at the simple matter of changing from worse to better because he hasn't considered the matter. For just as children dread the doctor's doses [c] and run from lessons, the very things that, by changing them from invalids and fools, will make them healthier and wiser, just so you have shied away from the change from one shape to another. At this very moment you are not only living in fear and trembling as a companion of

[a] After the Homeric formula, *e.g.*, *Odyssey*, x. 325.

[b] "Grunter," "swine."

[c] *Cf.* Lucretius, iv. 11 ff.: Plato, *Laws* 720 A. If one takes *Laws*, 646 C literally, there was some reason for fear.

(986) μαίνων τῇ Κίρκῃ σύνει,[1] μή σε ποιήσῃ λαθοῦσα σῦν ἢ λύκον, ἡμᾶς τε πείθεις, ἐν ἀφθόνοις ζῶντας ἀγαθοῖς, ἀπολιπόντας ἅμα τούτοις τὴν ταῦτα παρα- E σκευάζουσαν ἐκπλεῖν μετὰ σοῦ, τὸ πάντων βαρυποτμότατον[2] ζῷον αὖθις ἀνθρώπους γενομένους.

ΟΔ. Ἐμοὶ σύ, Γρύλλε, δοκεῖς οὐ τὴν μορφὴν μόνον ἀλλὰ καὶ τὴν διάνοιαν ὑπὸ τοῦ πόματος ἐκείνου διεφθάρθαι καὶ γεγονέναι μεστὸς ἀτόπων καὶ διαλελωβημένων παντάπασι δοξῶν· ἢ σέ τις αὖ[3] συηνίας[4] ἡδονὴ πρὸς τόδε τὸ σῶμα καταγεγοήτευκεν;

ΓΡ. Οὐδέτερα τούτων, ὦ βασιλεῦ Κεφαλλήνων· ἂν δὲ διαλέγεσθαι μᾶλλον ἐθέλῃς ἢ λοιδορεῖσθαι, ταχύ σε μεταπείσομεν, ἑκατέρου τῶν βίων ἐμπείρως ἔχοντες, ὅτι ταῦτα πρὸ ἐκείνων εἰκότως ἀγαπῶμεν.

ΟΔ. Ἀλλὰ μὴν ἐγὼ πρόθυμος[5] ἀκροᾶσθαι.

F 3. ΓΡ. Καὶ ἡμεῖς τοίνυν λέγειν. ἀρκτέον δὲ πρῶτον ἀπὸ τῶν ἀρετῶν, ἐφ' αἷς ὁρῶμεν ὑμᾶς μέγα φρονοῦντας, ὡς τῶν θηρίων πολὺ καὶ δικαιοσύνῃ καὶ φρονήσει καὶ ἀνδρείᾳ καὶ ταῖς ἄλλαις ἀρεταῖς διαφέροντας. ἀπόκριναι δή μοι, σοφώτατ' ἀνδρῶν· ἤκουσα γάρ σου ποτὲ διηγουμένου τῇ Κίρκῃ περὶ τῆς τῶν Κυκλώπων γῆς, ὡς οὔτ' ἀρουμένη τὸ παράπαν, οὔτε τινὸς εἰς αὐτὴν φυτεύοντος οὐδέν, οὕτως ἐστὶν ἀγαθὴ καὶ γενναία τὴν φύσιν,

[1] σύνει Reiske: συνεῖναι.
[2] βαρυποτμότατον Reiske: φιλοποτμότατον (φιλοτυφότατον καὶ δυσποτμότατον Post, "the vanity-loving and ill-fated animal beyond all others").
[3] αὖ] ἄρα Post; Hartman deletes.
[4] συηνίας Hartman: συνηθείας.
[5] πρόθυμος Reiske: πρὸς ὑμᾶς (ἔχω προθύμως Valckenaer).

Circe, frightened that she may, before you know it, turn you into a pig or a wolf, but you are also trying to persuade us, who live in an abundance of good things, to abandon them, and with them the lady who provides them, and sail away with you, when we have again become men, the most unfortunate of all creatures!

ODYSSEUS. To me, Gryllus, you seem to have lost not only your shape, but your intelligence also under the influence of that drug. You have become infected with strange and completely perverted notions. Or was it rather an inclination to swinishness that conjured you into this shape? [a]

GRYLLUS. Neither of these, king of the Cephallenians.[b] But if it is your pleasure to discuss the matter instead of hurling abuse, I shall quickly make you see that we are right to prefer our present life in place of the former one, now that we have tried both.

ODYSSEUS. Go on. I should like to hear you.

3. GRYLLUS. And I, in that case, to instruct you. Let us begin with the virtues, which, we note, inspire you with pride; for you rate yourselves as far superior to animals [c] in justice and wisdom and courage and all the rest of them. But answer me this, wisest of men! Once I heard you telling Circe about the land of the Cyclopes,[d] that though it is not ploughed at all nor does anyone sow there, yet it is naturally so fertile and fecund that it produces spontaneously

[a] That is, you were always a swine. It is only your shape that is altered.

[b] After Homer, *Iliad*, ii. 631; *Odyssey*, xxiv. 378; or, taking the pun, "King of Brains," "Mastermind."

[c] *Cf.* 962 A *supra*; on the virtues of animals see Aristotle, *Historia Animal.* i. 1 (488 f. 12 ff.); Plato, *Laches*, 196 E; *al.*

[d] Homer, *Odyssey*, ix. 108 ff.

(986) ὥσθ' ἅπαντας ἐκφέρειν τοὺς καρποὺς ἀφ' αὑτῆς·
987 πότερον οὖν ταύτην ἐπαινεῖς μᾶλλον ἢ τὴν αἰγίβοτον Ἰθάκην καὶ τραχεῖαν, ἣ μόλις ἀπ' ἔργων τε πολλῶν καὶ διὰ πόνων μεγάλων μικρὰ καὶ γλίσχρα καὶ μηδενὸς ἄξια τοῖς γεωργοῦσιν ἀναδίδωσι; καὶ ὅπως οὐ χαλεπῶς οἴσεις, παρὰ τὸ φαινόμενον εὐνοίᾳ τῆς πατρίδος ἀποκρινόμενος.

ΟΔ. Ἀλλ' οὐ δεῖ ψεύδεσθαι· φιλῶ μὲν γὰρ καὶ ἀσπάζομαι τὴν ἐμαυτοῦ πατρίδα καὶ χώραν μᾶλλον, ἐπαινῶ δὲ καὶ θαυμάζω τὴν ἐκείνων.

ΓΡ. Οὐκοῦν τοῦτο μὲν οὕτως ἔχειν φήσομεν, ὡς ὁ φρονιμώτατος ἀνθρώπων ἄλλα μὲν οἴεται δεῖν
B ἐπαινεῖν καὶ δοκιμάζειν ἄλλα δ' αἱρεῖσθαι καὶ ἀγαπᾶν, ἐκεῖνο δ' οἶμαί σε καὶ περὶ τῆς ψυχῆς ἀποκεκρίσθαι· ταὐτὸν γάρ ἐστι τῷ περὶ τῆς χώρας, ὡς ἀμείνων ἥτις ἄνευ πόνου τὴν ἀρετὴν ὥσπερ αὐτοφυῆ καρπὸν ἀναδίδωσιν.

ΟΔ. Ἔστω σοι καὶ τοῦθ' οὕτως.

ΓΡ. Ἤδη δ' οὖν[1] ὁμολογεῖς τὴν τῶν θηρίων ψυχὴν εὐφυεστέραν εἶναι πρὸς γένεσιν ἀρετῆς καὶ τελειοτέραν· ἀνεπίτακτος γὰρ καὶ ἀδίδακτος ὥσπερ ἄσπορος καὶ ἀνήροτος ἐκφέρει καὶ αὔξει κατὰ φύσιν τὴν ἑκάστῳ προσήκουσαν ἀρετήν.

ΟΔ. Καὶ τίνος ποτ' ἀρετῆς, ὦ Γρύλλε, μέτεστι τοῖς θηρίοις;

4. ΓΡ. Τίνος μὲν οὖν οὐχὶ μᾶλλον ἢ τῷ σοφω-
C τάτῳ τῶν ἀνθρώπων; σκόπει δὲ πρῶτον, εἰ βούλει, τὴν ἀνδρείαν, ἐφ' ᾗ σὺ φρονεῖς μέγα καὶ οὐκ ἐγκαλύπτῃ "θρασὺς" καὶ "πτολίπορθος" ἀποκαλού-

[1] δ' οὖν Benseler: οὖν.

[a] *Odyssey*, xiii. 242 ff.: *cf.* iv. 606.

every kind of crops. Do you, then, rate this land higher than rugged, goat-pasturing Ithaca,[a] which barely yields the tiller a meagre, churlish, trifling crop after great efforts and much toil? And see that you don't lose your temper and give me a patriotic answer that isn't what you really believe.

ODYSSEUS. I have no need to lie; for though I love and cherish my native soil more, the other wins my approval and admiration.

GRYLLUS. Then this, we shall say, is the situation: the wisest of men thinks fit to commend and approve one thing while he loves and prefers another. Now I assume that your answer applies to the spiritual field also, for the situation is the same as with the land[b]: that spiritual soil is better which produces a harvest of virtue as a spontaneous crop without toil.

ODYSSEUS. Yes, this too you may assume.

GRYLLUS. At this moment, then, you are conceding the point that the soul of beasts has a greater natural capacity and perfection for the generation of virtue; for without command or instruction, "unsown and unploughed," as it were, it naturally brings forth and develops such virtue as is proper in each case.

ODYSSEUS. And what sort of virtue, Gryllus, is ever found in beasts?

4. GRYLLUS. Ask rather what sort of virtue is not found in them more than in the wisest of men? Take first, if you please, courage, in which you take great pride, not even pretending to blush when you are called "valiant" and "sacker of cities."[c] Yet you,

[b] The principle *ubi bene, ibi patria*: Pacuvius, frag. 380 (Warmington, *Remains of Old Latin*, ii. p. 303): Aristophanes, *Plutus*, 1151: Cicero, *Tusc. Disp.* v. 37, 108; Appian, *B.C.* ii. 8. 50.

[c] *Iliad*, ii. 278.

(987) μενος, ὅστις, ὦ σχετλιώτατε, δόλοις καὶ μηχαναῖς ἀνθρώπους ἁπλοῦν καὶ γενναῖον εἰδότας πολέμου τρόπον ἀπάτης δὲ καὶ ψευδῶν ἀπείρους παρακρουσάμενος, ὄνομα τῇ πανουργίᾳ προστίθης τῆς ἀρετῆς τῆς[1] ἥκιστα πανουργίαν προσιεμένης. ἀλλὰ τῶν γε θηρίων τοὺς πρὸς ἄλληλα καὶ πρὸς ὑμᾶς ἀγῶνας ὁρᾷς ὡς ἄδολοι καὶ ἄτεχνοι καὶ μετ' ἐμφανοῦς γυμνοῦ τε τοῦ θαρρεῖν πρὸς ἀληθινῆς ἀλκῆς
D ποιοῦνται τὰς ἀμύνας· καὶ οὔτε νόμου καλοῦντος οὔτ' ἀστρατείας δεδοικότα γραφὴν ἀλλὰ φύσει φεύγοντα τὸ κρατεῖσθαι μέχρι τῶν ἐσχάτων ἐγκαρτερεῖ καὶ διαφυλάττει τὸ ἀήττητον· οὐ γὰρ ἡττᾶται κρατούμενα τοῖς σώμασιν οὐδ' ἀπαγορεύει ταῖς ψυχαῖς ἀλλὰ ταῖς μάχαις ἐναποθνῄσκει. πολλῶν δὲ θνησκόντων ἡ ἀλκὴ μετὰ τοῦ θυμοειδοῦς ἀποχωρήσασά ποι[2] καὶ συναθροισθεῖσα περὶ ἕν τι τοῦ σώματος μόριον ἀνθίσταται τῷ κτείνοντι καὶ πηδᾷ καὶ ἀγανακτεῖ,[3] μέχρις ἂν ὥσπερ πῦρ ἐγκατασβεσθῇ παντάπασι καὶ ἀπόληται.

Δέησις δ' οὐκ ἔστιν οὐδ' οἴκτου παραίτησις οὐδ' ἐξομολόγησις ἥττης, οὐδὲ δουλεύει λέων λέοντι καὶ
E ἵππος ἵππῳ δι' ἀνανδρίαν,[4] ὥσπερ ἄνθρωπος ἀνθρώπῳ, τὴν τῆς δειλίας ἐπώνυμον εὐκόλως ἐνασπαζόμενος. ὅσα δ' ἄνθρωποι πάγαις ἢ δόλοις ἐχειρώσαντο, τὰ μὲν ἤδη τέλεια[5] τροφὴν ἀπωσάμενα καὶ πρὸς δίψαν ἐγκαρτερήσαντα τὸν πρὸ δου-

[1] τῆς added by W. C. H. after Hartman.
[2] ποι Bernardakis : που.
[3] ἀγανακτεῖ] ἀναζεῖ Kronenberg.
[4] ἀνανδρίαν Meziriacus : ἀνδρείαν.

you villain, are the man who by tricks and frauds have led astray men who knew only a straightforward, noble style of war and were unversed in deceit and lies ; while on your freedom from scruple you confer the name of the virtue that is least compatible with such nefariousness. Wild beasts, however, you will observe, are guileless and artless in their struggles, whether against one another or against you, and conduct their battles with unmistakably naked courage under the impulse of genuine valour. No edict summons them, nor do they fear a writ of desertion. No, it is their nature to flee subjection ; with a stout heart they maintain an indomitable spirit to the very end. Nor are they conquered even when physically overpowered ; they never give up in their hearts, even while perishing in the fray. In many cases, when beasts are dying, their valour withdraws together with the fighting spirit to some point where it is concentrated in one member and resists the slayer with convulsive movements and fierce anger [a] until, like a fire, it is completely extinguished and departs.

Beasts never beg or sue for pity or acknowledge defeat : lion is never slave to lion, or horse to horse through cowardice, as man is to man when he unprotestingly accepts the name whose root is cowardice.[b] And when men have subdued beasts by snares and tricks, such of them as are full grown refuse food and endure the pangs of thirst until they

[a] Like eels or snakes whose tails continue to twitch long after they are dead.

[b] " Slavery " (*douleia*) as though derived from " cowardice " (*deilia*).

[5] τέλεια Hartman : τέλεια καὶ.

(987) λείας ἐπάγεται[1] καὶ ἀγαπᾷ θάνατον· νεοσσοῖς δὲ καὶ σκύμνοις τούτων, δι' ἡλικίαν εὐαγώγοις καὶ ἁπαλοῖς οὖσιν, πολλὰ καὶ ἀπατηλὰ μειλίγματα καὶ ὑποπεττεύματα[2] προσφέροντες καὶ καταφαρμάττοντες, ἡδονῶν παρὰ φύσιν γευόμενα καὶ διαίτης ἀδρανῆ χρόνῳ κατειργάσαντο, ἕως[3] προσεδέξαντο καὶ ὑπέμειναν τὴν καλουμένην ἐξημέρωσιν ὥσπερ
F ἀπογυναίκωσιν τοῦ θυμοειδοῦς.

Οἷς δὴ[4] μάλιστα δῆλον ὅτι τὰ θηρία πρὸς τὸ θαρρεῖν εὖ πέφυκε. τοῖς δ' ἀνθρώποις ἡ παρρησία[5] καὶ παρὰ φύσιν ἐστίν· ἐκεῖθεν δ' ἄν, ὦ βέλτιστ' Ὀδυσσεῦ, μάλιστα καταμάθοις· ἐν γὰρ τοῖς θηρίοις ἰσορροπεῖ πρὸς ἀλκὴν ἡ φύσις καὶ τὸ θῆλυ τοῦ ἄρρενος οὐδὲν ἀποδεῖ πονεῖν τε τοὺς ἐπὶ τοῖς ἀναγκαίοις πόνους ἀγωνίζεσθαί τε τοὺς ὑπὲρ τῶν τέκνων ἀγῶνας. ἀλλά που[6] Κρομμυωνίαν τινὰ σῦν ἀκούεις,[7] ἣ πράγματα πολλά, θῆλυ θηρίον οὖσα,
988 τῷ Θησεῖ παρέσχε· καὶ τὴν Σφίγγα ἐκείνην οὐκ ἂν ὤνησεν ἡ σοφία περὶ τὸ Φίκιον ἄνω καθεζομένην, αἰνίγματα καὶ γρίφους πλέκουσαν, εἰ μὴ ῥώμῃ καὶ ἀνδρείᾳ πολὺ τῶν Καδμείων ἐπεκράτει. ἐκεῖ δέ που καὶ Τευμησίαν[8] ἀλώπεκα "μέρμερον χρῆμα" καὶ πλησίον ὄφιν τῷ Ἀπόλλωνι περὶ τοῦ

[1] ἐπάγεται] ἀσπάζεται Bernardakis.
[2] ὑποπεττεύματα] ὑποπέμματα Meziriacus.
[3] ἕως Wyttenbach (who put it earlier) : καὶ.
[4] οἷς δὴ] τοῖσδε δὴ ? "Now the following facts . . ."
[5] παρρησία] εὐθάρσεια Emperius.
[6] που W. C. H. : καὶ.
[7] ἀκούεις] ἀκήκοας ?
[8] Τευμησίαν] most mss. have τελμησίαν.

[a] They also refuse to breed in captivity : Pliny, *Nat. Hist.* x. 182 ; *al.*

induce and embrace death in place of slavery.[a] But nestlings and cubs, which by reason of age are tender and docile, are offered many beguiling allurements and enticements that act as drugs. These give them a taste for unnatural pleasures and modes of life, and in time make them spiritless to the point where they accept and submit to their so-called "taming," which is really an emasculation of their fighting spirit.

These facts make it perfectly obvious that bravery is an innate characteristic of beasts, while in human beings an independent spirit is actually contrary to nature. The point that best proves this, gentle Odysseus, is the fact that in beasts valour is naturally equal in both sexes [b] and the female is in no way inferior to the male. She takes her part both in the struggle for existence and in the defence of her brood.[c] You have heard, I suppose, of the sow of Crommyon [d] which, though a female beast, caused so much trouble to Theseus. That famous Sphinx [e] would have got no good of her wisdom as she sat on the heights of Mt. Phicium, weaving her riddles and puzzles, if she had not continued to surpass the Thebans greatly in power and courage. Somewhere thereabouts lived also the Teumesian [f] vixen, a "thing atrocious" [g]; and not far away, they say, was the Pythoness who

[b] *Cf.* the Cynic doctrine in Diogenes Laertius, vi. 12: virtue is the same for women as for men.

[c] *Cf.* Plato, *Laws*, 814 B.

[d] *Cf. Life of Theseus*, 9 (4 D-E), which gives a rationalizing version of the story and converts the sow Phaea into a female bandit of the same name. See also Frazer on Apollodorus, *Epitome* i. 1 (L.C.L., vol. ii, p. 129); Plato, *Laches*, 196 E.

[e] *Cf.* Frazer on Apollodorus, *Library*, iii. 5. 8 (L.C.L., vol. i, p. 347).

[f] *Cf.* Frazer on Pausanias, ix. 19. 1.

[g] Presumably a quotation which has not been identified.

(988) χρηστηρίου μονομαχοῦσαν ἐν Δελφοῖς γενέσθαι λέγουσι. τὴν δ' Αἴθην ὁ βασιλεὺς ὑμῶν ἔλαβε παρὰ τοῦ Σικυωνίου μισθὸν ἀστρατείας, ἄριστα βουλευσάμενος ὃς δειλοῦ προυτίμησεν ἀνδρὸς ἵππον ἀγαθὴν καὶ φιλόνικον. αὐτὸς δὲ καὶ παρδάλεις καὶ λεαίνας πολλάκις ἑώρακας, ὡς οὐδέν τι τὰ θήλεα
B τοῖς ἄρρεσιν ὑφίεται θυμοῦ καὶ ἀλκῆς· ὥσπερ[1] ἡ σὴ γυνή, σοῦ πολεμοῦντος, οἴκοι κάθηται πρὸς ἐσχάρᾳ[2] πυρός, οὐκ ἂν οὐδ' ὅσον αἱ χελιδόνες ἀμυνομένη τοὺς ἐπ' αὐτὴν καὶ τὸν οἶκον βαδίζοντας, καὶ ταῦτα Λάκαινα οὖσα. τί οὖν ἔτι σοι λέγω τὰς Καρίνας ἢ Μαιονίδας; ἀλλ' ἐκ τούτων γε δῆλόν ἐστιν, ὅτι τοῖς ἀνδράσιν οὐ φύσει μέτεστι τῆς ἀνδρείας· μετῆν γὰρ ἂν ὁμοίως καὶ ταῖς γυναιξὶν ἀλκῆς. ὥσθ' ὑμεῖς, κατὰ νόμων ἀνάγκην οὐχ ἑκούσιον οὐδὲ βουλομένην ἀλλὰ δουλεύουσαν ἔθεσι καὶ ψόγοις καὶ δόξαις ἐπήλυσι καὶ λόγοις πλαττο-
C μένην, μελετᾶτε ἀνδρείαν· καὶ τοὺς πόνους ὑφίστασθε καὶ τοὺς κινδύνους, οὐ πρὸς ταῦτα θαρροῦντες ἀλλὰ τῷ ἕτερα μᾶλλον τούτων δεδιέναι. ὥσπερ οὖν τῶν σῶν ἑταίρων ὁ φθάσας πρῶτος ἐπὶ τὴν ἐλαφρὰν ἀνίσταται κώπην, οὐ καταφρονῶν ἐκείνης ἀλλὰ δεδιὼς καὶ φεύγων τὴν βαρυτέραν· οὕτως ὁ

[1] ὥσπερ] ἀλλ' οὐχ ὥσπερ Post, which may well be right.
[2] πρὸς ἐσχάρᾳ van Herwerden : πρὸς ἐσχάραν.

[a] *Cf. Mor.* 293 c, 421 c ; Frazer on Apollodorus, i. 4. 1 (L.C.L., vol. i, p. 27).
[b] Agamemnon (*Iliad*, xxiii. 295-299).
[c] A racing mare.
[d] Echepolus.
[e] As a daughter of Icarius, the brother of Tyndareüs, she was a first cousin of Helen.

fought with Apollo for the oracle at Delphi.[a] Your king[b] received Aethe[c] from the Sicyonian[d] as a recompense for excusing him from military service, making a very wise choice when he preferred a fine, spirited mare to a cowardly man. You yourself have often observed in panthers and lionesses that the female in no way yields to the male in spirit and valour. Yet, while you are off at the wars, your wife sits at home by the fire and troubles herself not so much as a swallow to ward off those who come against herself and her home—and this though she is a Spartan born and bred.[e] So why should I go on to mention Carian or Maeonian women?[f] Surely from what has been said it is perfectly obvious that men have no natural claim to courage[g]; if they did, women would have just as great a portion of valour. It follows that your practice of courage is brought about by legal compulsion, which is neither voluntary nor intentional, but in subservience to custom and censure and moulded by extraneous beliefs and arguments.[h] When you face toils and dangers, you do so not because you are courageous, but because you are more afraid of some alternative.[i] For just as that one of your companions who is the first to board ship stands up to the light oar, not because he thinks nothing of it, but because he fears and shuns the heavier one[j]; just so he who accepts the lash to

[f] Extreme examples of female lassitude, when even the Spartan Penelope is hopeless by Gryllus' high standards.

[g] *Cf.* Epicurus, frag. 517 (Usener).

[h] *Cf.* Aelian, *De Natura Animal.* vi. 1.

[i] *Cf.* Lucan, vii. 104 f.: "Multos in summa pericula misit | venturi timor ipse mali."

[j] He chooses the light oar, not because it is a mere nothing to work, but because he dreads the heavier one.

(988) πληγὴν ὑπομένων, ἵνα μὴ λάβῃ τραύματα, καὶ πρὸ αἰκίας τινὸς ἢ θανάτου πολέμιόν τιν' ἀμυνόμενος[1] οὐ πρὸς ταῦτα θαρραλέος ἀλλὰ πρὸς ἐκεῖνα δειλός ἐστιν. οὕτω δ' ἀναφαίνεται[2] ὑμῖν ἡ μὲν ἀνδρεία δειλία φρόνιμος οὖσα, τὸ δὲ θάρσος φόβος ἐπιστήμην ἔχων τοῦ δι' ἑτέρων ἕτερα φεύγειν. ὅλως δέ,
D εἰ πρὸς ἀνδρείαν οἴεσθε βελτίους εἶναι τῶν θηρίων, τί ποθ' ὑμῶν οἱ ποιηταὶ τοὺς κράτιστα τοῖς πολεμίοις μαχομένους "λυκόφρονας" καὶ "θυμολέοντας" καὶ "συῒ εἰκέλους ἀλκὴν" προσαγορεύουσιν, ἀλλ' οὐ λέοντά τις αὐτῶν "ἀνθρωπόθυμον," οὐ σῦν "ἀνδρὶ εἴκελον ἀλκὴν" προσαγορεύει; ἀλλ' ὥσπερ οἶμαι τοὺς ταχεῖς "ποδηνέμους" καὶ τοὺς καλοὺς "θεοειδεῖς" ὑπερβαλλόμενοι ταῖς εἰκόσιν ὀνομάζουσιν, οὕτω τῶν δεινῶν μάχεσθαι πρὸς τὰ κρείττονα ποιοῦνται τὰς ἀφομοιώσεις. αἴτιον δέ, ὅτι τῆς μὲν ἀνδρείας οἷον βαφή τις ὁ θυμός ἐστι καὶ στόμωμα· τούτῳ δ' ἀκράτῳ τὰ θηρία χρῆται πρὸς τοὺς ἀγῶνας, ὑμῖν δὲ προσμιγνύμε-
E νος πρὸς τὸν λογισμὸν ὥσπερ οἶνος πρὸς ὕδωρ ἐξίσταται παρὰ τὰ δεινὰ καὶ ἀπολείπει τὸν καιρόν. ἔνιοι δ' ὑμῶν οὐδ' ὅλως φασὶ χρῆναι παραλαμβάνειν ἐν ταῖς μάχαις τὸν θυμὸν ἀλλ' ἐκποδὼν θεμένους νήφοντι χρῆσθαι τῷ λογισμῷ, πρὸς μὲν σωτηρίας ἀσφάλειαν ὀρθῶς, πρὸς δ' ἀλκὴν καὶ ἄμυναν αἴσχιστα λέγοντες. πῶς γὰρ οὐκ ἄτοπον αἰτιᾶσθαι μὲν ὑμᾶς τὴν φύσιν, ὅτι μὴ κέντρα προσ-

[1] τιν' ἀμυνόμενος] ἀνταμυνόμενος Post.
[2] ἀναφαίνεται] most mss. have ἀναφαίνει (ἀνεφάνη Reiske).

[a] *Cf.* Plato, *Phaedo*, 68 D.
[b] In Homer (*Iliad*, xv. 430) and elsewhere used only as a proper name. Plutarch's source is probably the lost Epic Cycle.

escape the sword, or meets a foe in battle rather than be tortured or killed, does so not from courage to face the one situation, but from fear of the other. So it is clear that all your courage is merely the cowardice of prudence and all your valour merely fear that has the good sense to escape one course by taking another.[a] And, to sum up, if you think that you are better in courage than beasts, why do your poets call the doughtiest fighters "wolf-minded"[b] and "lion-hearted"[c] and "like a boar in valour,"[d] though no poet ever called a lion "man-hearted" or a boar "like a man in valour"? But, I imagine, just as when those who are swift are called "wind-footed"[e] and those who are handsome are called "godlike,"[f] there is exaggeration in the imagery; just so the poets bring in a higher ideal when they compare mighty warriors to something else. And the reason is that the spirit of anger is, as it were, the tempering or the cutting edge of courage. Now beasts use this undiluted in their contests, whereas you men have it mixed with calculation, as wine with water, so that it is displaced in the presence of danger and fails you when you need it most. Some of you even declare that anger should not enter at all into fighting, but be dismissed in order to make use of sober calculation[g]; their contention is correct so far as self-preservation goes, but is disgracefully false as regards valorous defence. For surely it is absurd for you to find fault with Nature because she did not equip

[c] *Iliad*, v. 639; vii. 228; of Odysseus himself in *Odyssey*, iv. 724.
[d] *Iliad*, iv. 253.
[e] *Iliad*, ii. 786 and often (of Iris).
[f] *Iliad*, iii. 16 and often.
[g] For the calculation of fear see Plato, *Laws*, 644 D.

(988) ἔφυσε τοῖς σώμασι μηδ' ἀμυντηρίους ὀδόντας μηδ' ἀγκύλους ὄνυχας, αὐτοὺς δὲ τῆς ψυχῆς τὸ σύμφυτον ἀφαιρεῖν ὅπλον καὶ κολούειν;

5. ΟΔ. Παπαί, ὦ Γρύλλε, δεινός μοι δοκεῖς γε-
F γονέναι σοφιστής, ὅς γε καὶ νῦν ἐκ τῆς συηνίας φθεγγόμενος οὕτω νεανικῶς πρὸς τὴν ὑπόθεσιν ἐπικεχείρηκας. ἀλλὰ τί οὐ περὶ τῆς σωφροσύνης ἐφεξῆς διεξῆλθες;

ΓΡ. Ὅτι ᾤμην σε τῶν εἰρημένων πρότερον ἐπιλήψεσθαι· σὺ δὲ σπεύδεις ἀκοῦσαι τὸ περὶ τῆς σωφροσύνης, ἐπεὶ σωφρονεστάτης μὲν ἀνὴρ εἶ γυναικός, ἀπόδειξιν δὲ σωφροσύνης αὐτὸς οἴει δεδωκέναι, τῶν Κίρκης ἀφροδισίων περιφρονήσας. κἂν[1] τούτῳ μὲν οὐδενὸς τῶν θηρίων διαφέρεις πρὸς ἐγκράτειαν· οὐδὲ γὰρ ἐκεῖνα τοῖς κρείττοσιν ἐπι-
989 θυμεῖ πλησιάζειν ἀλλὰ καὶ τὰς ἡδονὰς καὶ τοὺς ἔρωτας πρὸς τὰ ὁμόφυλα ποιεῖται. οὐ θαυμαστὸν οὖν ἐστιν, εἰ καθάπερ ὁ Μενδήσιος ἐν Αἰγύπτῳ τράγος λέγεται πολλαῖς καὶ καλαῖς συνειργνύμενος γυναιξὶν οὐκ εἶναι μίγνυσθαι πρόθυμος ἀλλὰ πρὸς τὰς αἶγας ἐπτοῆσθαι[2] μᾶλλον, οὕτω σὺ χαίρων ἀφροδισίοις συνήθεσιν οὐ θέλεις ἄνθρωπος ὢν θεᾷ συγκαθεύδειν. τὴν δὲ Πηνελόπης σωφροσύνην μυρίαι κορῶναι κρώζουσαι γέλωτα θήσονται καὶ καταφρονήσουσιν, ὧν ἑκάστη,[3] ἂν ἀποθάνῃ ὁ ἄρρην,

[1] κἂν Reiske : καί.
[2] ἐπτοῆσθαι Wyttenbach : ἐπτόηται.
[3] ἑκάστη Wyttenbach : ἑκάστης.

[a] "Comparative anatomy teaches us that man resembles frugivorous animals in everything, and carnivorous in nothing; he has neither claws wherewith to seize his prey, nor distinct and pointed teeth to tear the living fibre" (Shelley, *A Vindication of Natural Diet*; see the introduction to the

your bodies with natural stings, or place fighting tusks among your teeth, or give you nails like curved claws,[a] while you yourselves remove or curb the emotional instrument that Nature has given.

5. ODYSSEUS. Bless me, Gryllus, you must once have been a very clever sophist,[b] one may judge, since even as things are, and speaking from your swinishness, you can attack the subject with such fervent ardour. But why have you failed to discuss temperance, the next in order?

GRYLLUS. Because I thought that you would first wish to take exception to what I have said. But you are eager to hear about temperance since you are the husband of a model of chastity and believe that you yourself have given a proof of self-control by rejecting the embraces of Circe. And in this you are no more continent than any of the beasts; for neither do they desire to consort with their betters, but pursue both pleasure and love with mates of like species. So it is no wonder that, like the Mendesian [c] goat in Egypt which, when shut up with many beautiful women, is said not to be eager to consort with them, but is far more excited about nannies, you likewise are contented with the kind of love that is familiar to you and, being a mortal, are not eager to sleep with a goddess. As for the chastity of Penelope, the cawing of countless crows will pour laughter and contempt upon it; for every crow, if her mate dies, remains a widow, not merely for a

following essay). For some modern remarks *cf.* Boulenger, *Animal Mysteries*, p. 196.

[b] Gryllus acknowledges the truth of this soft impeachment later on, 989 B *infra*.

[c] *Cf.* Herodotus, ii. 46; Strabo xvii. 19; and contrast Aelian, *De Natura Animal.* vii. 19.

(989) οὐκ ὀλίγον χρόνον ἀλλ' ἐννέα χηρεύει γενεὰς ἀνθρώ-
B πων· ὥστε σοι τὴν καλὴν Πηνελόπην ἐννάκις ἀπολείπεσθαι τῷ[1] σωφρονεῖν ἧς βούλει κορώνης.

6. 'Αλλ' ἐπεί σε μὴ λέληθα σοφιστὴς ὤν, φέρε χρήσωμαι τάξει τινὶ τοῦ λόγου, τῆς μὲν σωφροσύνης ὅρον θέμενος, κατὰ γένος δὲ[2] τὰς ἐπιθυμίας διελόμενος. ἡ μὲν οὖν σωφροσύνη βραχύτης[3] τίς ἐστιν ἐπιθυμιῶν καὶ τάξις, ἀναιροῦσα μὲν τὰς ἐπεισάκτους καὶ περιττάς, καιρῷ δὲ καὶ μετριότητι κοσμοῦσα τὰς ἀναγκαίας. ταῖς δ' ἐπιθυμίαις ἐνορᾷς[4] που μυρίαν διαφοράν . . . καὶ τὴν περὶ τὴν βρῶσιν καὶ τὴν[5] πόσιν ἅμα τῷ φυσικῷ καὶ τὸ ἀναγκαῖον ἔχουσαν· αἱ δὲ τῶν ἀφροδισίων αἷς
C ἀρχὰς ἡ φύσις ἐνδίδωσιν, ἔστι δέ που καὶ μὴ χρώμενον ἔχειν ἱκανῶς ἀπαλλαγέντα, φυσικαὶ μὲν οὐκ ἀναγκαῖαι δ' ἐκλήθησαν. τὸ δὲ τῶν μήτ' ἀναγκαίων μήτε φυσικῶν ἀλλ' ἔξωθεν ὑπὸ δόξης κενῆς δι' ἀπειροκαλίαν ἐπικεχυμένων γένος ὑμῶν μὲν ὀλίγου δεῖν τὰς φυσικὰς ἀπέκρυψεν ὑπὸ πλήθους ἁπάσας, ἔχει δὲ καθάπερ ξένος ὄχλος ἔπηλυς ἐν δήμῳ καταβιαζόμενος πρὸς τοὺς ἐγγενεῖς πολίτας. τὰ δὲ θηρία παντάπασιν ἀβάτους καὶ ἀνεπιμίκτους ἔχοντα τοῖς ἐπεισάκτοις πάθεσι τὰς ψυχὰς καὶ τοῖς βίοις πόρρω τῆς κενῆς δόξης ὥσπερ θαλάσσης ἀπῳκισμένα· τῷ μὲν[6] γλαφυρῶς καὶ περιττῶς διά-

[1] τῷ Wyttenbach : τοῦ. [2] δὲ] κατ' εἴδη δὲ Reiske.
[3] βραχύτης] βραδύτης Reiske.
[4] ἐνορᾷς Emperius : ἐφορᾷς.
[5] περὶ τὴν βρῶσιν καὶ τὴν added by Meziriacus.
[6] τῷ μὲν W. C. H. : τοῦ.

[a] *Cf. Mor.* 415 c and the note there.
[b] See Epicurus, frag. 456 (Usener): contrast Aristotle, *Nic. Ethics* iii. 10 ff. (1117 b 23 ff.); [Plato], *Def.* 411 E; *al.*

short time, but for nine generations of men.[a] It follows that your fair Penelope is nine times inferior in chastity to any crow you please.

6. Now since you are not unaware that I am a sophist, let me marshal my arguments in some order by defining temperance and analysing the desires according to their kinds. Temperance,[b] then, is a curtailment and an ordering of the desires that eliminate those that are extraneous or superfluous and discipline in modest and timely fashion those that are essential.[c] You can, of course, observe countless differences in the desires [d] . . . and the desire to eat and drink is at once natural and essential, while the pleasures of love, which, though they find their origin in nature, yet may be forgone and discarded without much inconvenience, have been called natural, but not essential. But there are desires of another kind, neither essential nor natural, that are imported in a deluge from without as a result of your inane illusions and because you lack true culture. So great is their multitude that the natural desires are, every one of them, all but overwhelmed, as though an alien rabble were overpowering the native citizenry. But beasts have souls completely inaccessible and closed to these adventitious passions and live their lives as free from empty illusions as though they dwelt far from the sea.[e] They fall short in the matter of delicate and luxurious living, but solidly

For the temperance of animals see Aristotle, *De Gen. Animal.* i. 4 (717 a 27).

[c] *Cf. Mor.* 127 A, 584 D f.

[d] There is probably a short lacuna at this point.

[e] See Plato, *Laws*, 704 E ff. (and Shorey, *What Plato Said*, *ad loc.* p. 630): the sea is the symbol of mischievous foreign influence. *Cf.* Aristotle, *Politics*, 1327 a 11 ff.

(989) D γειν ἀπολείπεται, τὸ δὲ σωφρονεῖν καὶ μᾶλλον εὐνομεῖσθαι ταῖς ἐπιθυμίαις, οὔτε πολλαῖς συνοικούσαις οὔτ' ἀλλοτρίαις, σφόδρα διαφυλάττεται.

Ἐμὲ γοῦν ποτε καὶ αὐτὸν οὐχ ἧττον ἢ σὲ νῦν ἐξέπληττε μὲν χρυσὸς ὡς κτῆμα τῶν[1] ἄλλων οὐδενὶ παραβλητόν, ᾕρει δ' ἄργυρος καὶ ἐλέφας· ὁ δὲ πλεῖστα τούτων κεκτημένος ἐδόκει μακάριός τις εἶναι καὶ θεοφιλὴς ἀνήρ, εἴτε Φρὺξ ἦν εἴτε Κὰρ τοῦ Δόλωνος ἀγεννέστερος καὶ τοῦ Πριάμου βαρυποτμότερος. ἐνταῦθα δ'[2] ἀνηρτημένος ἀεὶ ταῖς ἐπιθυμίας οὔτε χάριν οὔθ' ἡδονὴν ἀπὸ τῶν ἄλλων πραγμάτων ἀφθόνων ὄντων καὶ ἱκανῶν ἐκαρπού-
E μην, μεμφόμενος[3] τὸν ἐμαυτοῦ βίον, ὡς τῶν μεγίστων ἐνδεὴς καὶ ἄμοιρος ἀγαθῶν ἀπολελειμμένος. τοιγαροῦν σ' ὡς[4] μέμνημαι ἐν Κρήτῃ θεασάμενος ἀμπεχόνῃ κεκοσμημένον πανηγυρικῶς, οὐ τὴν φρόνησιν ἐζήλουν οὐδὲ τὴν ἀρετήν, ἀλλὰ τοῦ χιτῶνος εἰργασμένου περιττῶς τὴν λεπτότητα καὶ τῆς χλαμύδος οὔσης ἁλουργοῦ τὴν οὐλότητα καὶ τὸ κάλλος ἀγαπῶν καὶ τεθηπώς (εἶχε δέ τι καὶ ἡ πόρπη χρυσὸς οὖσα παίγνιον οἶμαι τορείαις[5] διηκριβωμένον) καὶ εἱπόμην γεγοητευμένος, ὥσπερ αἱ γυναῖκες. ἀλλὰ νῦν ἀπηλλαγμένος ἐκείνων τῶν κενῶν δοξῶν καὶ κεκαθαρμένος χρυσὸν μὲν καὶ
F ἄργυρον ὥσπερ τοὺς ἄλλους λίθους περιορῶν ὑπερβαίνω, ταῖς δὲ σαῖς χλανίσι καὶ τάπησιν οὐδὲν ἂν μὰ Δί' ἥδιον ἢ βαθεῖ καὶ μαλθακῷ πηλῷ μεστὸς

[1] κτῆμα τῶν Reiske, confirmed by mss.: κτημάτων.
[2] δ' added by Bernardakis.
[3] μεμφόμενος added by Wyttenbach.
[4] σ' ὡς Meziriacus: ὥς σε.

protect their sobriety and the better regulation of their desires since those that dwell within them are neither numerous nor alien.

Certainly there was a time when I myself, no less than you now, was dazzled by gold and held it to be an incomparable possession ; so likewise I was caught by the lure of silver and ivory and the man who had most property of this sort seemed to me to be a blissful favourite of the gods, whether he was a Phrygian or a Carian, one more villainous than Dolon [a] or more unfortunate than Priam.[b] In that situation, constantly activated [c] by these desires, I reaped no joy or pleasure from the other things of life, which I had sufficiently and to spare. I grumbled at my life, finding myself destitute of the most important things and a loser in the lottery of fortune. This is the reason why, as I recall, when I saw you once in Crete tricked out in holiday attire, it was not your intellect or your virtue that I envied, but the softness of the elegantly woven garment and the beautiful wool of your purple cloak that I admired and gaped at (the clasp, I believe, was of gold and had some frivolity worked on it in exquisitely fine intaglio). I followed you about as enchanted as a woman. But now I am rid and purified of all those empty illusions.[d] I have no eyes for gold and silver and can pass them by just like any common stone ; and as for your fine robes and tapestries, I swear there's nothing sweeter for me to rest in when I'm full than deep,

[a] See *Iliad*, x, where Dolon betrays Troy.

[b] See especially his speech, *Iliad*, xxii. 38-76.

[c] Like a puppet on strings.

[d] Man alone has luxury : Pliny, *Nat. Hist.* vii. 5.

[5] τορείαις Reiske, confirmed by mss. : τορείας.

(989) ὧν ἐγκατακλιθείην ἀναπαυόμενος. τῶν δὲ τοιούτων[1] τῶν ἐπεισάκτων ἐπιθυμιῶν οὐδεμία ταῖς ἡμετέραις ἐνοικίζεται ψυχαῖς· ἀλλὰ τὰ μὲν πλεῖστα ταῖς ἀναγκαίαις ὁ βίος ἡμῶν ἐπιθυμίαις καὶ ἡδοναῖς διοικεῖται, ταῖς δ' οὐκ ἀναγκαίαις ἀλλὰ φυσικαῖς μόνον οὔτ' ἀτάκτως οὔτ' ἀπλήστως ὁμιλοῦμεν.

990 7. Καὶ ταύτας γε πρῶτον διέλθωμεν. ἡ μὲν οὖν πρὸς τὰ εὐώδη καὶ κινοῦντα ταῖς ἀποφοραῖς τὴν ὄσφρησιν οἰκείως ἡδονὴ πρὸς τῷ τὸ ὄφελος καὶ προῖκα καὶ ἁπλοῦν ἔχειν ἅμα χρείαν τινὰ συμβάλλεται τῇ διαγνώσει τῆς τροφῆς. ἡ μὲν γὰρ γλῶττα τοῦ γλυκέος καὶ δριμέος καὶ αὐστηροῦ γνώμων ἐστί τε καὶ λέγεται, ὅταν τῷ γευστικῷ[2] προσμιγέντες οἱ χυμοὶ σύγχυσίν τινα λάβωσιν· ἡ δ' ὄσφρησις ἡμῶν πρὸ τῶν χυμῶν γνώμων οὖσα τῆς δυνάμεως ἑκάστου πολὺ τῶν βασιλικῶν προγευστῶν σκεπτικώτερον διαισθανομένη, τὸ μὲν οἰκεῖον εἴσω παρίησι τὸ δ' ἀλλότριον ἀπελαύνει καὶ οὐκ ἐᾷ θιγεῖν οὐδὲ
B λυπῆσαι τὴν γεῦσιν ἀλλὰ διαβάλλει καὶ κατηγορεῖ τὴν φαυλότητα πρὶν ἢ βλαβῆναι· τἄλλα δ' οὐκ ἐνοχλεῖ, καθάπερ ὑμῖν, τὰ θυμιάματα καὶ κιννάμωμα καὶ νάρδους καὶ φύλλα καὶ καλάμους Ἀραβικούς, μετὰ δεινῆς τινος δευσοποιοῦ καὶ[3] φαρμακίδος τέχνης, ἣ μυρεψικῆς ὄνομα, συνάγειν εἰς ταὐτὸ καὶ

[1] τῶν δε τοιούτων Meziriacus : τὰ δὲ τοιαῦτα.
[2] γευστικῷ Meziriacus : γνωστικῷ.
[3] δευσοποιοῦ καὶ Post : καὶ δευσοποιοῦ.

[a] *Cf.* Aelian, *De Natura Animal.* v. 45.
[b] The servant who pretasted the dishes at a king's table to make certain that none of them was poisoned ; *cf.* Athenaeus, 171 b ff. On the *collegium praegustatorum* at Rome see Furneaux on Tacitus, *Annals*, xii. 66. 5 and *Class. Phil.* xxvii, p. 160.

soft mud.[a] None, then, of such adventitious desires has a place in our souls ; our life for the most part is controlled by the essential desires and pleasures. As for those that are non-essential, but merely natural, we resort to them without either irregularity or excess.

7. Let us, in fact, first describe these pleasures. Our pleasure in fragrant substances, those that by their nature stimulate our sense of smell, besides the fact that our enjoyment of this is simple and costs nothing, also contributes to utility by providing a way for us to tell good food from bad. For the tongue is said to be, and is, a judge of what is sweet or bitter or sour, when liquid flavours combine and fuse with the organ of taste ; but our sense of smell, even before we taste, is a judge that can much more critically distinguish the quality of each article of food than any royal taster [b] in the world. It admits what is proper, rejects what is alien, and will not let it touch or give pain to the taste, but informs on and denounces what is bad before any harm is done. And in other respects smell is no nuisance to us, as it is to you, forcing you to collect and mix together incense of one kind or another and cinnamon [c] and nard [d] and malobathrum [e] and Arabian aromatic reeds,[f] with the aid of a formidable dyer's or witch's art, of the sort to which you give the name of unguentation,

[c] The aromatic bark of various species of *Cinnamomum*, especially *C. zeylanicum* Breyne, imported from India.

[d] As an import from north-eastern India (probably meant here), the rootstock of spikenard, *Nardostachys jatamansi* DC.

[e] The leaves of a plant of uncertain identity that grew in the Far East, perhaps Indian patchouli, *Pogostemon Patchouly* Pellet., or perhaps a type of cinnamon : *cf.* Pliny, *Nat. Hist.* xxiii. 93.

[f] Probably here sweet flag, *Acorus calamus* L.

(990) συμφυρᾶν[1] ἀναγκάζουσα, χρημάτων πολλῶν ἡδυπάθειαν ἄνανδρον καὶ κορασιώδη καὶ πρὸς οὐδὲν οὐδαμῶς χρήσιμον ὠνουμένοις.[2] ἀλλὰ καίπερ οὖσα τοιαύτη διέφθαρκεν οὐ μόνον πάσας γυναῖκας ἀλλὰ καὶ τῶν ἀνδρῶν ἤδη τοὺς πλείστους, ὡς μηδὲ ταῖς αὑτῶν ἐθέλειν συγγίνεσθαι γυναιξίν, εἰ μὴ μύρων
C ὑμῖν ὀδωδυῖαι καὶ διαπασμάτων εἰς ταὐτὸ φοιτῷεν. ἀλλὰ κάπρους τε σύες καὶ τράγους αἶγες καὶ τἄλλα θήλεα τοὺς συννόμους αὑτῶν ταῖς ἰδίαις ὀσμαῖς ἐπάγεται, δρόσου τε καθαρᾶς καὶ λειμώνων ὀδωδότα καὶ χλόης συμφέρεται πρὸς τοὺς γάμους ὑπὸ κοινῆς φιλοφροσύνης, οὐχὶ θρυπτόμεναι μὲν αἱ θήλειαι καὶ προϊσχόμεναι τῆς ἐπιθυμίας ἀπάτας καὶ γοητείας καὶ ἀρνήσεις, οἱ δ' ἄρρενες ὑπ' οἴστρου καὶ μαργότητος ὠνούμενοι μισθῶν καὶ πόνου καὶ λατρείας τὸ τῆς γενέσεως ἔργον, ἄδολον[3] δὲ σὺν καιρῷ καὶ ἄμισθον Ἀφροδίτην μετιόντες, ἣ καθ' ὥραν ἔτους ὥσπερ φυτῶν βλάστην ἐγείρουσα τῶν
D ζῴων τὴν ἐπιθυμίαν εὐθὺς ἔσβεσεν, οὔτε τοῦ θήλεος προσιεμένου μετὰ τὴν κύησιν οὔτε πειρῶντος ἔτι τοῦ ἄρρενος. οὕτω μικρὰν ἔχει καὶ ἀσθενῆ τιμὴν ἡδονὴ παρ' ἡμῖν, τὸ δ' ὅλον ἡ φύσις. ὅθεν οὔτ' ἄρρενος πρὸς ἄρρεν οὔτε θήλεος πρὸς θῆλυ μῖξιν αἱ[4] τῶν θηρίων ἐπιθυμίαι μέχρι γε νῦν ἐνηνόχασιν. ὑμῶν δὲ πολλὰ τοιαῦτα τῶν σεμνῶν καὶ ἀγαθῶν·

[1] συμφυρᾶν Bernardakis: συμφαγεῖν or συμφοιτεῖν (συμπαγῆναι Post).
[2] ὠνουμένοις Wyttenbach: ὠνουμένους.
[3] ἄδουλον Reiske.
[4] αἱ Meziriacus: εἶναι.

[a] *Cf.* Pliny's frequent and indignant remarks, *e.g. Nat. Hist.* xii. 29 and 83; also Seneca, *Qu. Nat.* vii. 30-31.

thus buying at a great price an effeminate, emasculating luxury which has absolutely no real use. Yet, though such is its nature, it has depraved not only every woman, but lately the greater part of men as well, so that they refuse to sleep even with their own wives unless they come to bed reeking with myrrh and scented powders.[a] But sows attract boars and nannies bucks and other female creatures their consorts by means of their own special odours ; scented, as they are, with pure dew and grassy meadows, they are attracted to the nuptial union by mutual affection.[b] The females are not coy and do not cloak their desires with deceits or trickeries or denials ; nor do the males, driven on by the sting of mad lust, purchase the act of procreation by money or toil or servitude. No ! Both parties celebrate at the proper time a love without deceit or hire, a love which in the season of spring [c] awakens, like the burgeoning of plants and trees, the desire of animals, and then immediately extinguishes it. Neither does the female continue to receive the male after she has conceived, nor does the male attempt her.[d] So slight and feeble is the regard we have for pleasure : our whole concern is with Nature. Whence it comes about that to this very day the desires of beasts have encompassed no homosexual mating.[e] But you have a fair amount of such trafficking among your high and mighty nobility, to say nothing of the baser

[b] *Cf. Mor.* 493 F ; Plato, *Laws*, 840 D ; Oppian, *Cyn.* i. 378.

[c] *Cf.* Pliny, *Nat. Hist.* x. 171 ; Philo, 48 (p. 123) : Aelian, *De Natura Animal.* ix. 63 ; Oppian, *Hal.* i. 473 ff.

[d] But see Oppian, *Cyn.* iii. 146 ff.

[e] *Cf.* Plato, *Laws*, 836 C ; but see Pliny, *Nat. Hist.* x. 166 ; Aelian, *De Natura Animal.* xv. 11 ; *Varia Hist.* i. 15 ; *al.*

(990) ἐῶ γὰρ τοὺς οὐδενὸς ἀξίους· ὁ δ' Ἀγαμέμνων τὴν Βοιωτίαν ἐπῆλθε κυνηγετῶν τὸν Ἄργυννον[1] ὑποφεύγοντα καὶ καταψευδόμενος τῆς θαλάσσης καὶ
E τῶν πνευμάτων . . . εἶτα καλὸν καλῶς ἑαυτὸν βαπτίζων εἰς τὴν Κωπαΐδα λίμνην, ὡς αὐτόθι κατασβέσων τὸν ἔρωτα καὶ τῆς ἐπιθυμίας ἀπαλλαξόμενος. ὁ δ' Ἡρακλῆς ὁμοίως ἑταῖρον ἀγένειον ἐπιδιώκων ἀπελείφθη τῶν ἀριστέων καὶ προὔδωκε τὸν στόλον· ἐν δὲ τῇ θόλῳ τοῦ Πτῴου Ἀπόλλωνος λαθών τις ὑμῶν ἐνέγραψεν "Ἀχιλλεὺς καλός," ἤδη τοῦ Ἀχιλλέως υἱὸν ἔχοντος· καὶ τὰ γράμματα πυνθάνομαι διαμένειν. ἀλεκτρυὼν δ' ἀλεκτρυόνος ἐπιβαίνων, θηλείας μὴ παρούσης, καταπίμπραται ζωός, μάντεώς τινος ἢ τερατοσκόπου μέγα καὶ δεινὸν ἀποφαίνοντος εἶναι τὸ γινόμενον. οὕτω καὶ παρ' αὐτῶν ἀνωμολόγηται τῶν ἀνθρώπων, ὅτι μᾶλλον
F τοῖς θηρίοις σωφρονεῖν προσήκει καὶ μὴ παραβιάζεσθαι ταῖς ἡδοναῖς τὴν φύσιν. τὰ δ' ἐν ὑμῖν ἀκόλαστα οὐδὲ τὸν νόμον ἔχουσα σύμμαχον ἡ φύσις ἐντὸς ὅρων καθείργνυσιν, ἀλλ' ὥσπερ ὑπὸ ῥεύματος ἐκφερόμενα πολλαχοῦ[2] ταῖς ἐπιθυμίαις δεινὴν ὕβριν καὶ ταραχὴν καὶ σύγχυσιν ἐν τοῖς ἀφροδισίοις ἀπεργάζεται τῆς φύσεως. καὶ γὰρ αἰγῶν ἐπειράθησαν ἄνδρες καὶ ὑῶν καὶ ἵππων μιγνύμενοι καὶ γυναῖκες

[1] Ἄργυννον Leopardus: ἀργαῖον.
[2] πολλαχοῦ] πολλάκις Hartman.

[a] See Barber and Butler on Propertius, iii. 7. 21.
[b] Probably a brief lacuna should be assumed.
[c] The story of Hylas is related by Theocritus, xiii, Apollonius Rhodius, i. 1207-1272, Propertius, i. 20; *al.*
[d] The Argonauts. [e] The famous shrine in Boeotia.

sort. Agamemnon [a] came to Boeotia hunting for Argynnus, who tried to elude him, and slandering the sea and winds [b] . . . then he gave his noble self a noble bath in Lake Copaïs to drown his passion there and get rid of his desire. Just so Heracles,[c] pursuing a beardless lad, lagged behind the other heroes [d] and deserted the expedition. On the Rotunda of Ptoian Apollo [e] one of your men secretly inscribed FAIR IS ACHILLES [f]—when Achilles already had a son. And I hear that the inscription is still in place.[g] But a cock that mounts another for the lack of a female is burned alive because some prophet or seer declares that such an event is an important and terrible omen. On this basis even men themselves acknowledge that beasts have a better claim to temperance and the non-violation of nature in their pleasures. Not even Nature, with Law for her ally, can keep within bounds the unchastened vice of your hearts ; but as though swept by the current of their lusts beyond the barrier at many points, men do such deeds as wantonly outrage Nature, upset her order, and confuse her distinctions. For men have, in fact, attempted to consort with goats [h] and sows and mares, and women have gone mad with lust for

[f] On the formula see Robinson and Fluck, "Greek Love Names" (*Johns Hopkins Archaeol. Stud.* xxiii, 1937).

[g] Reiske acutely observes that this is presumably an annotation of Plutarch himself, speaking not from Gryllus' character, but from his own. Since Odysseus, Achilles, and Gryllus were contemporaries, it would hardly be surprising that the inscription should still be there. And if it were, how would Gryllus know ?

[h] See Gow on Theocritus, i. 86 ; Bergen Evans, *op. cit.* 101 f., and on the "vileness" of animals, p. 173. For the general problem see, *e.g.*, J. Rosenbaum, *Geschichte der Lustseuche im Altertume* (Berlin, 1904), pp. 274 ff.

991 ἄρρεσι θηρίοις ἐπεμάνησαν· ἐκ γὰρ τῶν τοιούτων
γάμων ὑμῖν Μινώταυροι καὶ Αἰγίπανες, ὡς δ'
ἐγᾦμαι καὶ Σφίγγες ἀναβλαστάνουσι καὶ Κέν-
ταυροι. καίτοι διὰ λιμόν ποτ' ἀνθρώπου καὶ κύων
ἔφαγεν καὶ ὑπ' ἀνάγκης[1] ὄρνις ἀπεγεύσατο· πρὸς
δὲ συνουσίαν οὐδέποτε θηρίον ἐπεχείρησεν ἀνθρώπῳ
χρήσασθαι. θηρία δ' ἄνθρωποι καὶ πρὸς ταῦτα
καὶ πρὸς ἄλλα πολλὰ[2] καθ' ἡδονὰς βιάζονται καὶ
παρανομοῦσιν.

8. Οὕτω δὲ φαῦλοι καὶ ἀκρατεῖς περὶ τὰς εἰρη-
μένας ἐπιθυμίας ὄντες ἔτι μᾶλλον ἐν ταῖς ἀναγκαίαις
ἐλέγχονται πολὺ τῷ σωφρονεῖν ἀπολειπόμενοι τῶν
θηρίων. αὗται δ' εἰσὶν αἱ περὶ βρῶσιν καὶ πόσιν·
B ὧν ἡμεῖς μὲν τὸ ἡδὺ μετὰ χρείας τινὸς ἀεὶ λαμβάνο-
μεν, ὑμεῖς δὲ τὴν ἡδονὴν μᾶλλον ἢ τὸ κατὰ φύσιν
τῆς τροφῆς διώκοντες ὑπὸ πολλῶν καὶ μακρῶν
κολάζεσθε νοσημάτων, ἅπερ ἐκ μιᾶς πηγῆς ἐπαν-
τλούμενα[3] τῆς πλησμονῆς[4] παντοδαπῶν πνευμάτων
καὶ δυσκαθάρτων ὑμᾶς ἐμπίπλησι. πρῶτον μὲν
γὰρ ἑκάστῳ γένει ζῴου μία τροφὴ σύμφυλός ἐστι,
τοῖς μὲν πόα τοῖς δὲ ῥίζα τις ἢ καρπός· ὅσα δὲ
σαρκοφαγεῖ, πρὸς οὐδὲν ἄλλο τρέπεται βορᾶς εἶδος
οὐδ' ἀφαιρεῖται τῶν ἀσθενεστέρων τὴν τροφήν, ἀλλ'
ἐᾷ νέμεσθαι καὶ λέων ἔλαφον καὶ λύκος πρόβατον
C ᾗ πέφυκεν. ὁ δ' ἄνθρωπος ἐπὶ πάντα ταῖς ἡδοναῖς

[1] καὶ ὑπ' ἀνάγκης W. C. H.: ὑπ' ἀνάγκης καὶ.
[2] καὶ πρὸς . . . πολλὰ] these words should perhaps be deleted.
[3] ἐπαντλούμενα Wyttenbach: ἀπαντλούμενα.
[4] πλησμονῆς W. C. H.: πλησμονῆς τοῖς σώμασι.

[a] *Cf.* Frazer on Apollodorus, iii. 1. 4 (L.C.L., vol. i, pp. 305-307); Philo, 66 (p. 131).

male beasts. From such unions your Minotaurs [a] and Aegipans,[b] and, I suppose, your Sphinxes [c] and Centaurs [d] have arisen. Yet it is through hunger that dogs have occasionally eaten a man; and birds have tasted of human flesh through necessity; but no beast has ever attempted a human body for lustful reasons.[e] But the beasts I have mentioned and many others have been victims of the violent and lawless lusts of man.

8. Though men are so vile and incontinent where the desires I have spoken of are concerned, they can be proved to be even more so in the case of essential desires, being here far inferior to animals in temperance.[f] These are the desires for food and drink, in which we beasts always take our pleasure along with some sort of utility; whereas you, in your pursuit of pleasure rather than natural nourishment, are punished by many serious ailments which, welling up from one single source, the surfeit of your bodies, fill you with all manner of flatulence that is difficult to purge.[g] In the first place each species of animal has one single food proper to it, grass or some root or fruit. Those that are carnivorous resort to no other kind of nourishment, nor do they deprive those weaker than themselves of sustenance; but the lion lets the deer, and the wolf lets the sheep, feed in its natural pasture. But man in his pleasures is led

[b] "Goat Pans"; *cf.* Hyginus, fable 155; Mela, i. 8. 48.

[c] See Frazer on Apollodorus, iii. 5. 8 (L.C.L., vol. i, p. 347).

[d] See Frazer on Apollodorus, *Epitome*, i. 20 (L.C.L., vol. ii, p. 148); *Oxford Classical Dictionary, s.v.* "Centaurs."

[e] But see, *e.g.*, Aelian, *De Natura Animal.* xv. 14.

[f] *Cf.* Philo, 47 (p. 122).

[g] *Cf. Mor.* 131 F.

(991) ὑπὸ λαιμαργίας ἐξαγόμενος καὶ πειρώμενος πάντων καὶ ἀπογευόμενος, ὡς οὐδέπω τὸ πρόσφορον καὶ οἰκεῖον ἐγνωκώς, μόνος γέγονε τῶν ὄντων παμφάγον.

Καὶ σαρξὶ χρῆται πρῶτον ὑπ' οὐδεμιᾶς ἀπορίας οὐδ' ἀμηχανίας, ᾧ πάρεστιν ἀεὶ καθ' ὥραν ἄλλ' ἐπ' ἄλλοις ἀπὸ φυτῶν καὶ σπερμάτων τρυγῶντι καὶ λαμβάνοντι καὶ δρεπομένῳ μονονοὺ[1] κάμνειν διὰ πλῆθος· ἀλλ' ὑπὸ τρυφῆς καὶ κόρου τῶν ἀναγκαίων βρώσεις ἀνεπιτηδείους καὶ οὐ καθαρὰς σφαγαῖς ζῴων μετερχόμενος πολὺ τῶν ἀγριωτάτων θηρίων ὠμότερον. αἷμα μὲν γὰρ καὶ φόνος καὶ σάρκες D ἰκτίνῳ καὶ λύκῳ καὶ δράκοντι σιτίον οἰκεῖον, ἀνθρώπῳ δ' ὄψον ἐστίν. ἔπειτα παντὶ γένει χρώμενος οὐχ ὡς τὰ θηρία τῶν πλείστων ἀπέχεται, ὀλίγοις δὲ πολεμεῖ διὰ τὴν τῆς τροφῆς ἀνάγκην· ἀλλ' οὔτε τι πτηνὸν οὔτε νηκτόν, ὡς ἔπος εἰπεῖν, οὔτε χερσαῖον ἐκπέφευγε τὰς ἡμέρους δὴ λεγομένας ὑμῶν καὶ φιλοξένους τραπέζας.

9. Εἶεν· ἀλλ' ὄψοις χρῆσθε τούτοις ἐφηδύνοντες τὴν τροφήν· τί οὖν ἐπ' αὐτὰ ταῦτα . . . φῶντας;[2] ἀλλ' ἡ τῶν θηρίων φρόνησις τῶν μὲν ἀχρήστων καὶ ματαίων τεχνῶν οὐδεμιᾷ χώραν δίδωσι, τὰς δ' ἀναγκαίας οὐκ ἐπεισάκτους παρ' ἑτέρων οὐδὲ μι-

[1] μονονοὺ Reiske : μή.
[2] φῶντας] τρυφῶντας Bernardakis.

[a] *Cf.* 964 F *supra*; and with the whole passage *cf.* the impressive proem to the seventh book of Pliny's *Natural History*.

[b] "Man is the only animal liable to the disease of a continuously insatiable appetite." Pliny, *Nat. Hist.* xi. 283; *cf.* Philo, 62 (p. 136); Lucan, iv. 373-381; *al.*

astray by gluttony to everything edible [a]; he tries and tastes everything as if he had not yet come to recognize what is suitable and proper for him; alone of all creatures he is omnivorous.[b]

In the first place his eating of flesh is caused by no lack of means or methods,[c] for he can always in season harvest and garner and gather in such a succession of plants and grains as will all but tire him out with their abundance; but driven on by luxurious desires and satiety with merely essential nourishment, he pursues illicit food, made unclean by the slaughter of beasts; and he does this in a much more cruel way than the most savage beasts of prey. Blood and gore and raw flesh are the proper diet of kite and wolf and snake; to man they are an appetizer.[d] Then, too, man makes use of every kind of food and does not, like beasts, abstain from most kinds and consequently make war on a few only that he must have for food. In a word, nothing that flies or swims or moves on land has escaped your so-called civilized and hospitable tables.

9. Well, then. It is admitted that you use animals as appetizers to sweeten your fare.[e] Why, therefore [f] . . . Animal intelligence, on the contrary, allows no room for useless and pointless arts; and in the case of essential ones, we do not make one man with con-

[c] *Cf.* 993 D *infra.*

[d] *Cf.* 993 D, 995 C *infra.*

[e] Or "as supplementary food to make your basic fare more agreeable" (Andrews).

[f] There is probably a considerable lacuna at this point; it is indicated in one of the MSS. The sense may perhaps be: "Why, in providing yourselves with meat for your luxurious living, have you invented a special art whose practitioners make cookery their sole study? Animal intelligence, on the contrary," etc.

(991) E σθοῦ διδακτὰς οὐδὲ κολλῶσα μελέτῃ καὶ συμπηγνύουσα γλίσχρως τῶν θεωρημάτων ἕκαστον πρὸς ἕκαστον ἀλλ' αὐτόθεν ἐξ αὑτῆς οἷον ἰθαγενεῖς καὶ συμφύτους ἀναδίδωσι. τοὺς μὲν γὰρ Αἰγυπτίους πάντας ἰατροὺς ἀκούομεν εἶναι, τῶν δὲ ζῴων ἕκαστον οὐ μόνον πρὸς ἴασιν αὐτότεχνόν ἐστιν ἀλλὰ καὶ πρὸς διατροφὴν καὶ πρὸς ἀλκὴν θήραν τε καὶ φυλακὴν καὶ μουσικῆς ὅσον ἑκάστῳ προσήκει κατὰ φύσιν. παρὰ τίνος γὰρ ἡμεῖς ἐμάθομεν νοσοῦντες ἐπὶ τοὺς ποταμοὺς χάριν τῶν καρκίνων βαδίζειν; τίς δὲ τὰς χελώνας ἐδίδαξε τῆς ἔχεως φαγούσας τὴν ὀρίγανον ἐπεσθίειν; τίς δὲ τὰς Κρητικὰς αἶγας,
F ὅταν περιπέσωσι τοῖς τοξεύμασι, τὸ δίκταμνον διώκειν, οὗ βρωθέντος ἐκβάλλουσι τὰς ἀκίδας; ἂν γὰρ εἴπῃς, ὅπερ ἀληθές ἐστι, τούτων διδάσκαλον εἶναι τὴν φύσιν, εἰς τὴν κυριωτάτην καὶ σοφωτάτην ἀρχὴν ἀναφέρεις τὴν τῶν θηρίων φρόνησιν· ἣν εἰ μὴ λόγον οἴεσθε δεῖν μηδὲ φρόνησιν καλεῖν, ὥρα σκοπεῖν ὄνομα κάλλιον αὐτῇ καὶ τιμιώτερον,[1] ὥσπερ ἀμέλει καὶ δι' ἔργων ἀμείνονα καὶ θαυμασιωτέραν
992 παρέχεται τὴν δύναμιν· οὐκ ἀμαθὴς οὐδ' ἀπαίδευτος, αὐτομαθὴς δέ τις μᾶλλον οὖσα καὶ ἀπροσδεής, οὐ δι' ἀσθένειαν ἀλλὰ ῥώμῃ καὶ τελειότητι τῆς κατὰ φύσιν ἀρετῆς, χαίρειν ἐῶσα τὸν παρ' ἑτέρων διὰ μαθήσεως τοῦ φρονεῖν συνερανισμόν. ὅσα γοῦν ἄνθρωποι τρυφῶντες ἢ παίζοντες εἰς τὸ

[1] τιμιώτερον Meziriacus: τιμιώτατον.

[a] This curious statement may come from a misreading of Herodotus, ii. 84.

stant study cling to one department of knowledge and rivet him jealously to that; nor do we receive our arts as alien products or pay to be taught them. Our intelligence produces them on the spot unaided, as its own congenital and legitimate skills. I have heard that in Egypt[a] everyone is a physician; and in the case of beasts each one is not only his own specialist in medicine, but also in the providing of food, in warfare and hunting as well as in self-defence and music, in so far as any kind of animal has a natural gift for it. From whom have we swine learned, when we are sick, to resort to rivers to catch crabs? Who taught tortoises to devour marjoram after eating the snake?[b] And who instructed Cretan goats,[c] when they are pierced by an arrow, to look for dittany, after eating which the arrowhead falls out? For if you speak the truth and say that Nature is their teacher, you are elevating the intelligence of animals to the most sovereign and wisest of first principles. If you do not think that it should be called either reason or intelligence, it is high time for you to cast about for some fairer and even more honourable term to describe it, since certainly the faculty that it brings to bear in action is better and more remarkable.[d] It is no uninstructed or untrained faculty, but rather self-taught and self-sufficient—and not for lack of strength. It is just because of the health and completeness of its native virtue that it is indifferent to the contributions to its intelligence supplied by the lore of others. Such animals, at any rate, as man for amusement or easy living induces to

[b] *Cf.* 974 B *supra* and the note.
[c] *Cf.* 974 D *supra* and the note.
[d] That is, "better" than human intelligence.

(992) μανθάνειν καὶ μελετᾶν ἄγουσι, τούτων ἡ διάνοια καὶ παρὰ φύσιν τοῦ σώματος[1] περιουσίᾳ συνέσεως ἀναλαμβάνει τὰς μαθήσεις. ἐῶ γὰρ ἰχνεύειν σκύλακας καὶ βαδίζειν ἐν ῥυθμῷ πώλους μελετῶντας καὶ[2] κόρακας διαλέγεσθαι καὶ κύνας ἅλλεσθαι διὰ τροχῶν περιφερομένων. ἵπποι δὲ καὶ βόες ἐν θεά-
B τροις κατακλίσεις καὶ χορείας καὶ στάσεις παραβόλους καὶ κινήσεις οὐδ' ἀνθρώποις πάνυ ῥᾳδίας ἀκριβοῦσιν ἐκδιδασκόμενοι καὶ μνημονεύοντες εὐμαθείας ἐπίδειξιν εἰς[3] ἄλλο οὐδὲν οὐδαμῶς χρήσιμον ἔχουσαν.[4] εἰ δ' ἀπιστεῖς ὅτι τέχνας μανθάνομεν, ἄκουσον ὅτι καὶ διδάσκομεν. αἵ τε γὰρ πέρδικες ἐν τῷ προφεύγειν τοὺς νεοττοὺς ἐθίζουσιν ἀποκρύπτεσθαι καὶ προΐσχεσθαι βῶλον ἀνθ' ἑαυτῶν τοῖς ποσὶν ὑπτίους ἀναπεσόντας· καὶ τοῖς πελαργιδεῦσιν ὁρᾷς ἐπὶ τῶν τεγῶν ὡς οἱ τέλειοι παρόντες ἀναπειρωμένοις ὑφηγοῦνται τὴν πτῆσιν. αἱ δ'
C ἀηδόνες τοὺς νεοσσοὺς προδιδάσκουσιν ᾄδειν· οἱ δὲ ληφθέντες ἔτι νήπιοι καὶ τραφέντες ἐν χερσὶν ἀνθρώπων χεῖρον ᾄδουσιν, ὥσπερ πρὸ ὥρας ἀπὸ διδασκάλου γεγονότες. . . . καταδὺς δ' εἰς τουτὶ τὸ σῶμα θαυμάζω τοὺς λόγους ἐκείνους οἷς ἀνεπειθόμην ὑπὸ τῶν σοφιστῶν ἄλογα καὶ ἀνόητα πάντα πλὴν ἀνθρώπου νομίζειν.

10. ΟΔ. Νῦν μὲν οὖν, ὦ Γρύλλε, μεταβέβλησαι

[1] σώματος Reiske : σώματος καὶ.
[2] καὶ Hartman : ἀλλὰ (ἅμα καὶ Post).
[3] εἰς Reiske : ὡς.
[4] ἔχουσαν Wyttenbach : ἔχουσιν.

[a] Like our trotters or pacers.
[b] A somewhat similar performance of elephants is described in Philo, 27 (pp. 113 f.).

accept instruction and training have understanding to grasp what they are taught even when it goes contrary to their physical endowment, so superior are their mental powers. I say nothing of puppies that are trained as hunters, or colts schooled to keep time in their gait,[a] or crows that are taught to talk, or dogs, to jump through revolving hoops. In the theatres horses and steers go through an exact routine in which they lie down or dance or hold a precarious pose or perform movements not at all easy even for men[b]; and they remember what they have been taught, these exhibitions of docility which are not in the least useful for anything else. If you are doubtful that we can learn arts, then let me tell you that we can even teach them. When partridges[c] are making their escape, they accustom their fledglings to hide by falling on their backs and holding a lump of earth over themselves with their claws. You can observe storks on the roof, the adults showing the art of flying to the young as they make their trial flights.[d] Nightingales[e] set the example for their young to sing; while nestlings that are caught young and brought up by human care are poorer singers, as though they had left the care of their teacher too early.[f] . . . and since I have entered into this new body of mine, I marvel at those arguments by which the sophists[g] brought me to consider all creatures except man irrational and senseless.

10. ODYSSEUS. So now, Gryllus, you are trans-

[c] *Cf.* 971 C *supra*; *Mor.* 494 E and the note.

[d] In Aelian, *De Natura Animal.* viii. 22 will be found the tale of a stork who did not learn in time.

[e] *Cf.* 973 B *supra*.

[f] There is probably a long lacuna at this point.

[g] Probably the Stoics are meant (by anachronism).

(992) σὺ καὶ τὸ πρόβατον λογικὸν ἀποφαίνεις καὶ τὸν ὄνον;

ΓΡ. Αὐτοῖς μὲν οὖν τούτοις, ὦ βέλτιστε Ὀδυσσεῦ, μάλιστα δεῖ τεκμαίρεσθαι τὴν τῶν θηρίων φύσιν, ὡς λόγου καὶ συνέσεως οὐκ ἔστιν ἄμοιρος.
D ὡς γὰρ[1] οὐκ ἔστι δένδρον ἕτερον ἑτέρου μᾶλλον οὐδ' ἧττον ἄψυχον, ἀλλ' ὁμοίως ἔχει πάντα πρὸς ἀναισθησίαν (οὐδενὶ γὰρ αὐτῶν ψυχῆς μέτεστιν), οὕτως οὐκ ἂν ἐδόκει ζῷον ἕτερον ἑτέρου τῷ φρονεῖν ἀργότερον εἶναι καὶ δυσμαθέστερον, εἰ μὴ πάντα λόγου καὶ συνέσεως, ἄλλα δὲ μᾶλλον καὶ ἧττον ἄλλων πως μετεῖχεν. ἐννόησον δ' ὅτι τὰς ἐνίων ἀβελτερίας καὶ βλακείας ἐλέγχουσιν ἑτέρων πανουργίαι καὶ δριμύτητες, ὅταν ἀλώπεκι καὶ λύκῳ καὶ μελίττῃ[2] παραβάλῃς ὄνον καὶ πρόβατον· ὥσπερ εἰ σαυτῷ τὸν Πολύφημον ἢ τῷ πάππῳ σου τῷ Αὐτο-
E λύκῳ τὸν Κόροιβον ἐκεῖνον τὸν μωρόν.[3] οὐ γὰρ οἶμαι θηρίου πρὸς θηρίον ἀπόστασιν εἶναι τοσαύτην, ὅσον ἄνθρωπος ἀνθρώπου τῷ φρονεῖν καὶ λογίζεσθαι καὶ μνημονεύειν ἀφέστηκεν.

ΟΔ. Ἀλλ' ὅρα, Γρύλλε, μὴ δεινὸν ᾖ καὶ βίαιον ἀπολιπεῖν λόγον οἷς οὐκ ἐγγίνεται θεοῦ νόησις.

[1] ὡς γὰρ Wyttenbach: ὥσπερ.

formed. Do you attribute reason even to the sheep and the ass?

GRYLLUS. From even these, dearest Odysseus, it is perfectly possible to gather that animals have a natural endowment of reason and intellect. For just as one tree is not more nor less inanimate than another, but they are all in the same state of insensibility, since none is endowed with soul, in the same way one animal would not be thought to be more sluggish or indocile mentally than another if they did not all possess reason and intellect to some degree—though some have a greater or less proportion than others. Please note that cases of dullness and stupidity in some animals are demonstrated by the cleverness and sharpness of others—as when you compare an ass and a sheep with a fox or a wolf or a bee. It is like comparing Polyphemus to you or that dunce Coroebus [a] to your grandfather Autolycus.[b] I scarcely believe that there is such a spread between one animal and another as there is between man and man in the matter of judgement and reasoning and memory.

ODYSSEUS. But consider, Gryllus: is it not a fearful piece of violence to grant reason to creatures that have no inherent knowledge of God?

[a] For Haupt's fine correction (*Hermes*, vi, p. 4 = *Opuscula*, iii, p. 552) *cf.* Leutsch and Schneidewin, *Paroemiographi Graeci*, i. 101 (Zenobius, iv. 58); Lucian, *Philopseudis*, 3. Coroebus was proverbially so stupid that he tried to count the waves of the sea.

[b] *Odyssey*, xix. 394 ff.: Autolycus surpassed all men "in thefts and perjury," a gift of Hermes.

[2] *καὶ μελίττῃ*] should perhaps be deleted.

[3] *τὸν Κόροιβον ἐκεῖνον τὸν μωρόν* Haupt: *τὸν Κορίνθιον ἐκεῖνον ὅμηρον*.

(992) ΓΡ. Εἶτά σε μὴ φῶμεν, ὦ Ὀδυσσεῦ, σοφὸν οὕτως ὄντα καὶ περιττὸν Σισύφου γεγονέναι;

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[a] Most critics (and very emphatically Ziegler) believe that the end, perhaps quite a long continuation, is lost; but Reiske ingeniously supposes Gryllus' final answer to mean: "If those who do not know God cannot possess reason, then you, wise Odysseus, can scarcely be descended from such a notorious atheist as Sisyphus." (For Sisyphus' famous assertion that "the gods are only a utilitarian invention" see Critias, *Sisyphus*, frag. 1: Nauck, *Trag. Graec. Frag.* pp. 771 f.).

There would, then, be no further point in prolonging the discussion; and no doubt by this time Odysseus has changed his mind about the desirability of any further metamorphosis

GRYLLUS. Then shall we deny, Odysseus, that so wise and remarkable a man as you had Sisyphus for a father ? [a]

of his interlocutor, since the last argument touches him nearly. Sisyphus was said by some to be his real father (*Mor.* 301 D).

Others, however, believe that some discussion of further virtues, such as natural piety, must have followed : and perhaps the account closed with a consideration of justice. But would Odysseus have been convinced (*cf.* 986 B) ? Or is this as good a place as any to end ? Plutarch used no stage directions, so that, as in the classical Platonic dialogues, when the characters stop speaking, the discussion is over and we are left to draw our own conclusions. The undoubted fact, however, that the work is mutilated in several other places allows us to leave the question open.

ON THE EATING OF FLESH

(DE ESU CARNIUM)

I AND II

INTRODUCTION

These two badly mutilated discourses, urging the necessity for vegetarianism, are merely extracts from a series (see 996 A) which Plutarch delivered in his youth, perhaps to a Boeotian audience (995 E).[a] In spite of the exaggerated and calculated rhetoric[b] these fragments probably depict faithfully a foible of Plutarch's early manhood, the Pythagorean or Orphic[c] abstention from animal food. There is little trace of this in his later life as known to us, though a corrupt passage in the *Symposiacs* (635 E) seems to say that because of a dream our author abstained from eggs for a long time. In the *De Sanitate Tuenda* also (132 A) Plutarch excuses flesh-eating on the ground that habit "has become a sort of unnatural second nature."

The work appears, on the whole, rather immature beside the *Gryllus* and the *De Sollertia Animalium*, but the text is so poor that this may not be the author's fault. In fact the excerptor responsible for our jumbled text, introducing both stupid interpolations (see especially 998 A) and even an extract from an entirely different work (994 B-D), may well have

[a] This was Hirzel's opinion (*Der Dialog*, ii, p. 126, n. 2), which Ziegler (*RE*, *s.v.* "Plutarchos," col. 734) combats.

[b] F. Krauss, *Die rhetorischen Schriften Plutarchs*, pp. 77 ff.

[c] Plato, *Laws*, 782 C. Plutarch, *Mor.* 159 C, makes Solon say, "To refrain entirely from eating meat, as they record of Orpheus long ago, is rather a quibble than a way of avoiding wrong diet."

altered Plutarch's wording in many other places where we have not the means to detect him.

Porphyry [a] (*De Abstinentia*, iii. 24) says that Plutarch attacked the Stoics and Peripatetics in many books; in this one the anti-Stoic polemic has only just begun (999 A) when the work breaks off. For a more complete assault the reader must turn back to the two preceding dialogues.

It is interesting to learn that Shelley found these fragments inspiring. In the eighth book of *Queen Mab* (verses 211 ff.) we read:

> No longer now
> He slays the lamb that looks him in the face,
> And horribly devours his mangled flesh,
> Which, still avenging Nature's broken law,
> Kindled all putrid humours in his frame,
> All evil passions, and all vain belief, . . .
> The germs of misery, death, disease, and crime.

To this passage the poet appended, *more suo*, a long note which ended with four quotations from our essay in Greek, untranslated (a compliment to the public of his day, one may suppose). This note he subsequently republished as *A Vindication of Natural Diet* (1813), omitting the Greek; and in the same year he wrote to Thomas Hogg that he had "translated the two Essays of Plutarch, Περὶ σαρκοφαγίας." But this has been lost; it has not, at least, been found among the unpublished Shelley material in the Bodleian.[b]

[a] It is, of course, possible that Porphyry used some portion of the missing parts of our work; but this cannot be proved and may even be thought unlikely in view of the fact that he makes no use of any extant portion.

[b] These facts I owe to the kindness of Professors J. A. Notopoulos of Trinity College and J. E. Jordan of the University of California; see also K. N. Cameron, *The Young Shelley*, pp. 224 f.

THE EATING OF FLESH

This is one of the eighteen works of the received Corpus of Plutarch that do not appear in the Lamprias Catalogue. Such a fact is not, however, to be adduced against its genuineness, since the *Symposiacs* themselves are not to be found there.[a]

[a] It is important to observe that H. Fuchs, *Der geistige Widerstand gegen Rom*, p. 49, n. 60, athetizes this work. A further discussion by this great critic would be warmly welcomed, especially since Wilamowitz recognized here also "den unverkennbaren Stempel der plutarchischen Art."

993 ## ΠΕΡΙ ΣΑΡΚΟΦΑΓΙΑΣ

ΛΟΓΟΣ Α΄

1. Ἀλλὰ σὺ μὲν ἐρωτᾷς τίνι λόγῳ Πυθαγόρας ἀπείχετο σαρκοφαγίας; ἐγὼ δὲ θαυμάζω καὶ τίνι
B πάθει καὶ ποίᾳ ψυχῇ ἢ λόγῳ ὁ πρῶτος ἄνθρωπος ἥψατο φόνου στόματι καὶ τεθνηκότος ζῴου χείλεσι προσήψατο σαρκὸς καὶ νεκρῶν σωμάτων καὶ ἑώλων[1] προθέμενος τραπέζας ὄψα καὶ τροφὰς[2] προσεῖπεν[3] τὰ μικρὸν ἔμπροσθεν βρυχώμενα μέρη καὶ φθεγγόμενα καὶ κινούμενα καὶ βλέποντα. πῶς ἡ ὄψις ὑπέμεινε τὸν φόνον σφαζομένων δερομένων διαμελιζομένων, πῶς ἡ ὄσφρησις ἤνεγκε τὴν ἀποφοράν, πῶς τὴν γεῦσιν οὐκ ἀπέτρεψεν ὁ μολυσμὸς ἑλκῶν ψαύουσαν ἀλλοτρίων καὶ τραυμάτων θανασίμων χυμοὺς καὶ ἰχῶρας ἀπολαμβάνουσαν;[4]

C εἷρπον μὲν ῥινοί, κρέα δ' ἀμφ' ὀβελοῖς ἐμεμύκει
ὀπταλέα τε καὶ ὠμά, βοῶν δ' ὣς γίγνετο φωνή·

τοῦτο μὲν[5] πλάσμα καὶ μῦθός ἐστι, τὸ δέ γε δεῖπνον ἀληθῶς τερατῶδες, πεινῆν τινα τῶν μυκωμένων

[1] ἑώλων van Herwerden: εἰδώλων.
[2] τρυφὰς] mss. and early editions have also τροφήν, τρυφάς, and τρυφὴν (see Sandbach, *Class. Quart.* xxxv (1941), p. 114).
[3] προσεῖπεν Kronenberg (*cf.* 995 c): καὶ προσέτι εἰπεῖν.
[4] ἀναλαμβάνουσαν Wyttenbach.

ON THE EATING OF FLESH

I

1. Can you really ask what reason Pythagoras[a] had for abstaining from flesh? For my part I rather wonder both by what accident and in what state of soul or mind the first man[b] who did so, touched his mouth to gore and brought his lips to the flesh of a dead creature, he who set forth tables of dead, stale[c] bodies and ventured to call food and nourishment the parts that had a little before bellowed and cried, moved and lived. How could his eyes endure the slaughter when throats were slit and hides flayed and limbs torn from limb? How could his nose endure the stench? How was it that the pollution did not turn away his taste, which made contact with the sores of others and sucked juices and serums from mortal wounds?

> The skins shivered; and upon the spits the flesh bellowed,
> Both cooked and raw: the voice of kine was heard.[d]

Though this is an invention and a myth, yet that sort of dinner is really portentous—when a man craves the

[a] *Cf.* 964 F *supra*. [b] *Cf.* 959 E *supra*.
[c] *Cf.* 991 D *supra*, 995 C *infra*.
[d] Homer, *Odyssey*, xii. 395-396.

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[5] μὲν added by Reiske.

(993) ἔτι[1] διδάσκοντα ἀφ' ὧν δεῖ τρέφεσθαι ζώντων ἔτι καὶ λαλούντων καὶ[2] διαταττόμενον ἀρτύσεις τινὰς καὶ ὀπτήσεις καὶ παραθέσεις· τούτων[3] ἔδει ζητεῖν τὸν πρῶτον ἀρξάμενον οὐ τὸν ὀψὲ παυσάμενον.

2. Ἢ τοῖς μὲν πρώτοις ἐκείνοις ἐπιχειρήσασι σαρκοφαγεῖν τὴν αἰτίαν εἴποι πᾶς ἂν τὴν χρείαν[4] καὶ τὴν ἀπορίαν; οὐ γὰρ ἐπιθυμίαις ἀνόμοις συν-
D διάγοντες οὐδ' ἐν περιουσίᾳ τῶν[5] ἀναγκαίων ὑβρίσαντες εἰς ἡδονὰς παρὰ φύσιν ἀσυμφύλους ἐπὶ ταῦτ' ἦλθον· ἀλλ' εἴποιεν ἂν αἴσθησιν ἐν τῷ παρόντι καὶ φωνὴν λαβόντες· "ὦ μακάριοι καὶ θεοφιλεῖς οἱ νῦν ὄντες ὑμεῖς, οἷον βίου λαχόντες αἰῶνα καρποῦσθε καὶ νέμεσθε κλῆρον ἀγαθῶν ἄφθονον· ὅσα φύεται ὑμῖν, ὅσα τρυγᾶται, ὅσον πλοῦτον ἐκ πεδίων, ὅσας ἀπὸ φυτῶν ἡδονὰς[6] δρέπεσθαι πάρεστιν. ἔξεστιν ὑμῖν καὶ τρυφᾶν μὴ μιαινομένοις. ἡμᾶς δὲ σκυθρωπότατον καὶ φοβερώτατον ἐδέξατο βίου καὶ χρόνου μέρος, εἰς πολλὴν καὶ ἀμήχανον ἐκπεσόντας ὑπὸ τῆς πρώτης γενέσεως ἀπορίαν· ἔτι μὲν οὐρανὸν
E ἔκρυπτεν ἀὴρ καὶ ἄστρα θολερῷ καὶ δυσδιαστατοῦντι[7] πεφυρμένος[8] ὑγρῷ καὶ πυρὶ καὶ ζάλαις ἀνέ-

[1] ἔτι Stephanus : ἔτι καί.
[2] καὶ added by Stephanus.
[3] τούτων Turnebus : τοῦτον.
[4] εἴποι πᾶς ἂν τὴν χρείαν Sandbach, after Amyot : ἂν εἴποι πᾶσαν.
[5] τῶν Diels : τινὶ.
[6] ἡδονὰς Stephanus : ἡδονὰς ἃς.
[7] δυσδιαστατοῦντι Xylander : δυστατοῦντι.
[8] πεφυρμένος Wilamowitz : πεφυρμένα.

[a] "Hyperbius . . . first killed an animal, Prometheus an ox." (Pliny, *Nat. Hist.* vii. 209.) See also the amusing

meat that is still bellowing, giving instructions which tell us on what animals we are to feed while they are still alive uttering their cries, and organizing various methods of seasoning and roasting and serving. It is the man [a] who first began these practices that one should seek out, not him who all too late desisted.[b]

2. Or would everyone declare that the reason for those who first instituted flesh-eating was the necessity of their poverty ? It was not while they passed their time in unlawful desires nor when they had necessaries in abundance that after indulgence in unnatural and antisocial pleasures they resorted to such a practice. If, at this moment, they could recover feelings and voice, they might, indeed, remark : " Oh blessed and beloved of the gods, you who live now, what an age has fallen to your lot wherein you enjoy and assimilate a heritage abounding in good things ! How many plants grow for you ! What vintages you gather ! What wealth you may draw from the plains and what pleasant sustenance from trees ! Why, you may even live luxuriously without the stain of blood. But as for us, it was a most dismal and fearful portion of the world's history [c] that confronted us, falling as we did into great and unbearable poverty brought on by our first appearance among the living. As yet the heavens and the stars were concealed by dense air that was contaminated with turbid moisture, not easily to be penetrated, and fire and furious wind. Not yet was

analysis of Prometheus and the vulture (=disease) in Shelley's *A Vindication of Natural Diet.*

[b] Pythagoras.

[c] *Cf.* Empedocles, frag. B 2. 3 (Diels-Kranz, *Frag. der Vorsok.* i, p. 309) ; the whole passage is received as a doubtful fragment (B 154 ; i, pp. 371 f.).

(993) μων· οὔπω δ' ἥλιος ἵδρυτο ἀπλανῆ καὶ βέβαιον

ἔχων δρόμον, ἠῶ
καὶ δύσιν ἔκρινεν, περὶ δ' ἤγαγεν αὖθις ὀπίσσω
καρποφόροισιν ἐπιστέψας καλυκοστεφάνοισιν[1]
ὥραις· γῆ δ' ὕβριστο

ποταμῶν ἐκβολαῖς ἀτάκτοις, καὶ τὰ πολλὰ[2] "λίμναισιν ἄμορφα" καὶ πηλοῖς βαθέσι καὶ λόχμαις ἀφόροις καὶ ὕλαις ἐξηγρίωτο· φορὰ δ' ἡμέρων καρπῶν καὶ τέχνης ὄργανον οὐδὲν ἦν[3] οὐδὲ μηχανὴ σοφίας· ὁ δὲ λιμὸς οὐκ ἐδίδου χρόνον οὐδ' ὥρας ἐτησίους σπόρος πυρῶν[4] τότ' ἀνέμενε. τί θαυμαστὸν εἰ ζῴων ἐχρησάμεθα σαρξὶ παρὰ φύσιν, ὅτ' ἰλὺς[5]
F ἠσθίετο καὶ φλοιὸς ἐβρώθη ξύλου, καὶ ἄγρωστιν εὑρεῖν βλαστάνουσαν ἢ φλεώ[6] τινα ῥίζαν εὐτυχὲς ἦν; βαλάνου δὲ γευσάμενοι καὶ φαγόντες ἐχορεύσαμεν[7] ὑφ' ἡδονῆς περὶ δρῦν τινα καὶ φηγόν, ζείδωρον καὶ μητέρα καὶ τροφὸν ἀποκαλοῦντες· ἐκείνην
994 μόνην[8] ὁ τότε βίος ἑορτὴν ἔγνω, τὰ δ' ἄλλα φλεγμονῆς ἦν ἅπαντα μεστὰ καὶ στυγνότητος. ὑμᾶς δὲ τοὺς[9] νῦν τίς λύσσα καὶ τίς οἶστρος ἄγει πρὸς μιαιφονίαν, οἷς τοσαῦτα περίεστι τῶν ἀναγκαίων; τί καταψεύδεσθε τῆς γῆς ὡς τρέφειν μὴ δυναμένης; τί τὴν θεσμοφόρον ἀσεβεῖτε Δήμητρα καὶ τὸν

1 καλυκοστεφάνοισιν Jacobs: κάλυκος στεφάνοισιν.
2 τὰ πολλὰ Bernardakis: πολλά.
3 ἦν added by Wilamowitz.
4 πυρῶν Diels: ὧν.
5 ἰλὺς] δρῦς Bernardakis.
6 φλεώ Stephanus: φλοιοῦ.
7 ἐχορεύσαμεν Sieveking: ἐχόρευσαν.
8 μόνην Xylander: ἦν.
9 τοὺς Stephanus: πῶς.

the sun established undeviating

> In his firm course,
> Dividing day and night ; he brought them back
> Again and crowned them with the fruitful hours
> All wreathed with bloom, while violence

had been done to earth by rivers pouring forth their floods at random and most parts were deformed by pools.[a] Earth was made a wilderness by deep quagmires and the unfruitful growth of thickets and forests ; nor was there as yet any agricultural production or professional tool or any resource of skill. Our hunger gave us no respite nor was there any seed at that time awaiting the annual season of sowing. What wonder if, contrary to nature, we made use of the flesh of beasts when even mud was eaten and the bark of trees devoured, and to light on sprouting grass or the root of a rush was a piece of luck ? When we had tasted and eaten acorns we danced for joy around some oak,[b] calling it "life-giving"[c] and "mother" and "nurse." This was the only festival that those times had discovered ; all else was a medley of anguish and gloom. But you who live now, what madness, what frenzy drives you to the pollution of shedding blood, you who have such a superfluity of necessities ? Why slander the earth by implying that she cannot support you ? Why impiously offend law-giving Demeter[d] and

[a] You could not tell land from water, because invading water made pools that dried up later.

[b] "*Drys* was a term used especially for *Quercus robur* L. ; *phegos* for *Q. aegilops* L. Actually the early Greeks ate the acorns mostly of *Q. aegilops*." (Andrews.)

[c] The epithet properly meant "wheat-giving" (as in Homer, *Iliad*, ii. 548), but was early misinterpreted.

[d] *Cf. Mor.* 1119 E.

(994) ἡμερίδην καὶ μειλίχιον αἰσχύνετε Διόνυσον, ὡς οὐχ ἱκανὰ παρὰ τούτων λαμβάνοντες; οὐκ αἰδεῖσθε τοὺς ἡμέρους καρποὺς αἵματι καὶ φόνῳ μιγνύοντες; ἀλλὰ δράκοντας ἀγρίους καλεῖτε καὶ παρδάλεις καὶ λέοντας, αὐτοὶ δὲ μιαιφονεῖτε εἰς ὠμότητα κατα-
B λιπόντες ἐκείνοις οὐδέν· ἐκείνοις μὲν γὰρ ὁ φόνος τροφή, ὑμῖν δ' ὄψον ἐστίν."

3. Οὐ γὰρ δὴ λέοντάς γ' ἀμυνόμενοι καὶ λύκους ἐσθίομεν· ἀλλὰ ταῦτα μὲν ἐῶμεν, τὰ δ' ἀβλαβῆ καὶ χειροήθη καὶ ἄκεντρα καὶ νωδὰ πρὸς τὸ δακεῖν συλλαμβάνοντες ἀποκτιννύομεν, ἃ νὴ Δία καὶ κάλλους ἕνεκα καὶ χάριτος ἡ φύσις ἔοικεν ἐξενεγκεῖν . . .

["Ὅμοιον ὡς εἴ τις τὸν Νεῖλον ὁρῶν πλημμυροῦντα καὶ τὴν χώραν ἐμπιπλάντα[1] γονίμου καὶ καρποφόρου ῥεύματος μὴ τοῦτο θαυμάζοι τοῦ φερομένου, τὸ φυτάλμιον καὶ εὔκαρπον τῶν ἡμερωτάτων καὶ βιωφελεστάτων καρπῶν, ἀλλ' ἰδών που καὶ κροκόδειλον ἐννηχόμενον καὶ ἀσπίδα κατασυρομένην καὶ
C μυρία[2] ἄγρια ζῷα,[3] ταύτας λέγοι τὰς αἰτίας τῆς μέμψεως καὶ τῆς τοῦ πράγματος ἀνάγκης· ἢ νὴ Δία τὴν γῆν ταύτην καὶ τὴν ἄρουραν ἀποβλέψας ἐμπεπλησμένην ἡμέρων καρπῶν καὶ βρίθουσαν ἀσταχύων, ἔπειθ' ὑποβλέψας[4] που τοῖς ληίοις τούτοις

[1] ἐμπιπλάντα van Herwerden : ἐμπιπλῶντα.
[2] μυρία Wilamowitz : μύας or μυίας.
[3] ζῷα Wilamowitz : ζῷα καὶ μιαρά.
[4] ἐπιβλέψας van Herwerden.

[a] Cf. Mor. 451 c (where the epithet is otherwise interpreted), 663 D, 692 E.

bring shame upon Dionysus, lord of the cultivated vine,[a] the gracious one, as if you did not receive enough from their hands? Are you not ashamed to mingle domestic crops with blood and gore? You call serpents and panthers and lions savage, but you yourselves, by your own foul slaughters, leave them no room to outdo you in cruelty; for their slaughter is their living, yours is a mere appetizer." [b]

3. It is certainly not lions and wolves that we eat out of self-defence; on the contrary, we ignore these and slaughter harmless, tame creatures without stings or teeth to harm us, creatures that, I swear, Nature appears to have produced for the sake of their beauty and grace. . . . [c]

[It is as though one, seeing the Nile overflow its banks, filling the landscape with its fertile and productive stream, should not marvel at this, its nourishing of plants and its fruitfulness in such crops as are most to be cultivated and contribute most to the support of life, but should espy a crocodile swimming there somewhere or an asp being swept along or a thousand other savage creatures and should cite them as the reasons for his censure and his compulsion to do as he does.[d] Or, I swear, it is as though one fixed one's gaze on this land and its soil covered with cultivated crops and heavy with ears of wheat, and then, looking beneath these rich harvests, one were to catch sight somewhere of a

[b] As above in 991 D. See the interesting observations in G. Murray, *Rise of the Greek Epic*[3], p. 64 and the note.

[c] The rest of this chapter, though possibly by Plutarch, is probably from another quite different work. Chapter 4 follows quite naturally upon this sentence.

[d] These words, plainly out of context as the passage stands, are too vague to be rendered with any certainty.

(994) καί πού τινος αἴρας στάχυν ἰδὼν καὶ ὀροβάγχην,[1] εἶτ' ἀφεὶς ἐκεῖνα καρποῦσθαι καὶ ληίζεσθαι μέμψαιτο[2] περὶ τούτων. τοιοῦτόν τι, καὶ λόγον ῥήτορος ὁρῶν ἐν δίκῃ τινὶ καὶ συνηγορίᾳ πληθύοντα καὶ φερόμενον ἐπὶ βοηθείᾳ κινδύνων, ἢ νὴ Δί' ἐλέγχῳ
D καὶ κατηγορίᾳ τολμημάτων καὶ ἀποδείξεων, ῥέοντα δὲ καὶ φερόμενον οὐχ ἁπλῶς οὐδὲ λιτῶς, ἀλλ' ὁμοῦ πάθεσι πολλοῖς μᾶλλον δὲ παντοδαποῖς, εἰς ψυχὰς ὁμοίως πολλὰς καὶ ποικίλας καὶ διαφόρους τῶν ἀκροωμένων ἢ τῶν δικαζόντων, ἃς δεῖ τρέψαι καὶ μεταβαλεῖν ἢ νὴ Δία πραῦναι καὶ ἡμερῶσαι καὶ καταστῆσαι· εἶτα παρεὶς τοῦτο τοῦ πράγματος ὁρᾶν καὶ μετρεῖν τὸ κεφάλαιον καταγώνισμα,[3] παραρρήσεις ἐκλέγων, ἃς κατιὼν ὁ λόγος συγκατήνεγκε τῇ ῥύμῃ τῆς φορᾶς, συνεκπεσούσας καὶ παρολισθούσας τῷ λοιπῷ τοῦ λόγου. καὶ δημηγόρου τινὸς ὁρῶν. . . .]

4. Ἀλλ' οὐδὲν ἡμᾶς δυσωπεῖ, οὐ χρόας ἀνθηρὸν
E εἶδος, οὐ φωνῆς ἐμμελοῦς πιθανότης, οὐ[4] τὸ καθάριον ἐν διαίτῃ καὶ περιττὸν ἐν συνέσει τῶν ἀθλίων, ἀλλὰ σαρκιδίου μικροῦ χάριν ἀφαιρούμεθα ψυχῆς ἥλιον, φῶς, τὸν τοῦ βίου χρόνον, ἐφ' ᾧ[5] γέγονε καὶ πέφυκεν. εἶθ' ἃς φθέγγεται καὶ διατρίζει[6] φωνὰς ἀνάρθρους εἶναι δοκοῦμεν, οὐ παραιτήσεις καὶ δεήσεις καὶ δικαιολογίας ἑκάστου λέγοντος "οὐ

[1] ὀροβάγχην Xylander : ὀριβάχην and the like.
[2] μέμψαιτο W. C. H. : μέμψοιτο.
[3] κεφάλαιον καταγώνισμα Post after Turnebus : φύλαιον καὶ ἀγώνισμα (φιλότιμον Sandbach).
[4] οὐ] in the mss. the words οὐ πανουργία ψυχῆς precede; deleted by W. C. H.
[5] ἐφ' ἃ Reiske.
[6] διατρίζει van Herwerden : διέτρεσε.

growth of darnel or broom-rape and, without more ado, ceasing to reap the benefit and claim the booty of the good crops, burst into a tirade about the weeds. Another example: if one should see an orator making a speech at some trial where he was advocate, a speech in which his eloquence in full flood was advancing to the succour of someone in jeopardy or (so help me) to the conviction or denunciation of rash acts or defaults—a flood of eloquence not simple or jejune, but charged with many (or rather all kinds of) emotional appeals for the simultaneous influencing of the many different kinds of minds in the audience or jury, which must either be roused and won over or (by heaven!) soothed and made gentle and calm—then if one neglected to observe and take into account this main point and issue of the matter, but merely picked out flaws of style that the flood of oratory, as it moved to its goal, had swept along by the momentum of its current, flaws that came rushing out and slipped by with the rest—and seeing . . . of some popular leader. . . . [a]]

4. But nothing abashed us, not the flower-like tinting of the flesh, not the persuasiveness of the harmonious voice, not the cleanliness of their habits or the unusual intelligence that may be found in the poor wretches. No, for the sake of a little flesh we deprive them of sun, of light, of the duration of life to which they are entitled by birth and being. Then we go on to assume that when they utter cries and squeaks their speech is inarticulate, that they do not, begging for mercy, entreating, seeking justice,

[a] The rest of this perplexing fragment has been lost, so that we do not know what the object of these three comparisons is.

(994) παραιτοῦμαί σου τὴν ἀνάγκην ἀλλὰ τὴν ὕβριν· ἵνα φάγῃς ἀπόκτεινον, ἵνα δ' ἥδιον φάγῃς μή μ' ἀναίρει." ὦ τῆς ὠμότητος· δεινὸν μέν ἐστι καὶ τιθεμένην ἰδεῖν τράπεζαν ἀνθρώπων πλουσίων ὡς[1] F νεκροκόμοις[2] χρωμένων μαγείροις καὶ ὀψοποιοῖς, δεινότερον δ' ἀποκομιζομένην· πλείονα γὰρ τὰ λειπόμενα τῶν βεβρωμένων ἐστίν. οὐκοῦν ταῦτα μάτην ἀπέθανεν. ἕτεροι[3] δὲ φειδόμενοι τῶν παρατεθέντων οὐκ ἐῶσι τέμνειν οὐδὲ κατακόπτειν, παραιτούμενοι νεκρά,[4] ζώντων δ' οὐκ ἐφείσαντο.

5. Ἄλογον γὰρ εἶναί φαμεν[5] ἐκείνους λέγειν τοὺς ἄνδρας ἀρχὴν ἔχειν τὴν φύσιν· ὅτι γὰρ οὐκ ἔστιν ἀνθρώπῳ κατὰ φύσιν τὸ σαρκοφαγεῖν, πρῶτον μὲν ἀπὸ τῶν σωμάτων δηλοῦται τῆς κατασκευῆς. οὐδενὶ γὰρ ἔοικε τὸ ἀνθρώπου σῶμα τῶν ἐπὶ σαρκοφαγίᾳ γεγονότων, οὐ γρυπότης χείλους, οὐκ 995 ὀξύτης ὄνυχος, οὐ τραχύτης ὀδόντος πρόσεστιν, οὐ κοιλίας εὐτονία καὶ πνεύματος θερμότης, πέψαι[6] καὶ κατεργάσασθαι δυνατὴ τὸ βαρὺ καὶ κρεῶδες· ἀλλ' αὐτόθεν ἡ φύσις τῇ λειότητι τῶν ὀδόντων καὶ τῇ σμικρότητι τοῦ στόματος καὶ τῇ μαλακότητι τῆς γλώσσης καὶ τῇ πρὸς πέψιν ἀμβλύτητι τοῦ πνεύματος ἐξόμνυται τὴν σαρκοφαγίαν. εἰ δὲ λέγεις πεφυκέναι σεαυτὸν ἐπὶ τοιαύτην ἐδωδήν, ὃ βούλει φαγεῖν πρῶτον αὐτὸς ἀπόκτεινον, ἀλλ' αὐτὸς

[1] ὡς added by W. C. H.
[2] νεκροκόμοις Stuart Jones : νεκροκόσμοις.
[3] ἕτεροι] ἑτέρως ? (ἕτερα Wilamowitz).
[4] νεκρὰ Wyttenbach : κρέα.
[5] ἄλογον γὰρ εἶναί φαμεν Bernardakis : ἀλλ' ἄγε παρειλήφαμεν.
[6] πέψαι Cobet : τρέψαι.

each one of them say, " I do not ask to be spared in case of necessity ; only spare me your arrogance ! Kill me to eat, but not to please your palate ! " Oh, the cruelty of it ! What a terrible thing it is to look on when the tables of the rich are spread, men who employ cooks and spicers to groom the dead ! And it is even more terrible to look on when they are taken away, for more is left than has been eaten. So the beasts died for nothing ! There are others who refuse when the dishes are already set before them and will not have them cut into or sliced. Though they bid spare the dead, they did not spare the living.[a]

5. We declare, then, that it is absurd for them to say that the practice of flesh-eating is based on Nature. For that man is not naturally carnivorous is, in the first place, obvious from the structure of his body.[b] A man's frame is in no way similar to those creatures who were made for flesh-eating : he has no hooked beak or sharp nails or jagged teeth, no strong stomach or warmth of vital fluids able to digest and assimilate a heavy diet of flesh.[c] It is from this very fact, the evenness of our teeth, the smallness of our mouths, the softness of our tongues, our possession of vital fluids too inert to digest meat that Nature disavows our eating of flesh. If you declare that you are naturally designed for such a diet, then first kill for yourself what you want to eat. Do it, however, only through your own resources,

[a] Post believes that there is another lacuna after this chapter : and Stephanus posited another one after the first sentence of chapter 5, rightly, if Bernardakis' emendation is not accepted.

[b] See 988 E *supra* and the note.

[c] *Cf. Mor.* 87 B, 642 C.

(995) διὰ σεαυτοῦ, μὴ χρησάμενος κοπίδι μηδὲ τυμπάνῳ[1] τινὶ μηδὲ πελέκει· ἀλλά, ὡς λύκοι καὶ ἄρκτοι καὶ B λέοντες αὐτοὶ ὅσα[2] ἐσθίουσι φονεύουσιν, ἄνελε δήγματι βοῦν ἢ στόματι σῦν, ἢ ἄρνα ἢ λαγωὸν διάρρηξον καὶ φάγε προσπεσὼν ἔτι ζῶντος, ὡς ἐκεῖνα. εἰ δ' ἀναμένεις νεκρὸν γενέσθαι τὸ ἐσθιόμενον[3] καὶ δυσωπεῖ σε παροῦσα ψυχὴ ἀπολαύειν[4] τῆς σαρκός, τί παρὰ φύσιν ἐσθίεις τὸ ἔμψυχον; ἀλλ' οὐδ' ἄψυχον ἄν τις φάγοι καὶ νεκρὸν οἷόν ἐστιν, ἀλλ' ἕψουσιν ὀπτῶσι μεταβάλλουσι διὰ πυρὸς καὶ φαρμάκων, ἀλλοιοῦντες καὶ τρέποντες καὶ σβεννύοντες ἡδύσμασι μυρίοις τὸν φόνον, ἵν' ἡ γεῦσις ἐξαπατηθεῖσα προσδέξηται τἀλλότριον.

Καίτοι χαρίεν γε τὸ τοῦ Λάκωνος, ὃς ἰχθύδιον ἐν C πανδοκείῳ πριάμενος τῷ πανδοκεῖ σκευάσαι παρέδωκεν· αἰτοῦντος δ' ἐκείνου τυρὸν καὶ ὄξος καὶ ἔλαιον, "ἀλλ' εἰ ταῦτ' εἶχον," εἶπεν, "οὐκ ἂν ἰχθὺν ἐπριάμην." ἡμεῖς δ' οὕτως ἐν τῷ μιαιφόνῳ τρυφῶμεν, ὥστ' ὄψον τὸ κρέας προσαγορεύομεν, εἶτ' ὄψων πρὸς αὐτὸ τὸ κρέας δεόμεθα, ἀναμιγνύντες ἔλαιον οἶνον μέλι γάρον ὄξος ἡδύσμασι Συριακοῖς Ἀραβικοῖς, ὥσπερ ὄντως νεκρὸν ἐν-

[1] τυμπάνῳ] τυπάνῳ Salmasius ; τυκάνῃ Meziriacus ; τυπάδι Bernardakis.
[2] ὅσα Reiske : ὡς.
[3] ἐσθιόμενον Stephanus : αἰσθόμενον.
[4] παροῦσα ψυχὴ ἀπολαύειν Emperius : παροῦσαν ψυχὴν ἀπελαύνειν.

[a] "Let the advocate of animal food force himself to a decisive experiment on its fitness, and, as Plutarch recommends, tear a living lamb with his teeth, and, plunging his

unaided by cleaver or cudgel of any kind or axe. Rather, just as wolves and bears and lions themselves slay what they eat, so you are to fell an ox with your fangs or a boar with your jaws, or tear a lamb or hare in bits. Fall upon it and eat it still living, as animals do.[a] But if you wait for what you eat to be dead, if you have qualms about enjoying the flesh while life is still present, why do you continue, contrary to nature, to eat what possesses life? Even when it is lifeless and dead, however, no one eats the flesh just as it is; men boil it and roast it, altering it by fire and drugs, recasting and diverting and smothering with countless condiments the taste of gore so that the palate may be deceived and accept what is foreign to it.

It was, indeed, a witty remark of the Spartan[b] who bought a little fish in an inn and gave it to the innkeeper to prepare. When the latter asked for cheese and vinegar and oil,[c] the Spartan said, "If I had those, I should not have bought a fish." But we are so refined in our blood-letting that we term flesh a supplementary food[d]; and then we need "supplements" for the flesh itself, mixing oil, wine, honey, fish paste, vinegar, with Syrian and Arabian spices,[e] as though we were really embalming a corpse for

head into its vitals, slake his thirst with the steaming blood" (Shelley, *op. cit.*).

[b] *Cf. Mor.* 234 E-F, where it is meat, not fish, that is bought: see also 128 C.

[c] To make a sauce for the fish. The innkeeper's action was natural enough, in view of Hegesander's comment (Athenaeus, 564 A) that apparently everyone liked the seasonings, not the fish, since no one wanted fish plain and unseasoned.

[d] See 991 D (and the note), 993 B, 994 B *supra*.

[e] See 990 B *supra*.

(995) ταφιάζοντες. καὶ γὰρ οὕτως αὐτῶν διαλυθέντων καὶ μαλαχθέντων καὶ τρόπον τινὰ προσαπέντων[1] ἔργον ἐστὶ τὴν πέψιν κρατῆσαι, καὶ διακρατηθείσης δεινὰς[2] βαρύτητας ἐμποιεῖ καὶ νοσώδεις ἀπεψίας.

6. Διογένης δ' ὠμὸν φαγεῖν πολύπουν ἐτόλμησεν,
D ἵνα τὴν διὰ τοῦ πυρὸς ἐκβάλῃ κατεργασίαν τῶν κρεῶν[3]· καὶ πολλῶν περιεστώτων αὐτὸν[4] ἀνθρώπων, ἐγκαλυψάμενος τῷ τρίβωνι καὶ τῷ στόματι προσφέρων τὸ κρέας, "ὑπὲρ ὑμῶν," φησίν, "ἐγὼ παραβάλλομαι καὶ προκινδυνεύω." καλόν, ὦ Ζεῦ, κίνδυνον· οὐ γάρ, ὡς Πελοπίδας ὑπὲρ τῆς Θηβαίων[5] ἐλευθερίας ἢ ὡς Ἁρμόδιος καὶ Ἀριστογείτων ὑπὲρ τῆς[6] Ἀθηναίων, προεκινδύνευσεν ὁ φιλόσοφος ὠμῷ πολύποδι διαμαχόμενος, ἵνα τὸν βίον ἀποθηριώσῃ;

Οὐ τοίνυν μόνον αἱ κρεοφαγίαι τοῖς σώμασι
E γίνονται παρὰ φύσιν, ἀλλὰ καὶ τὰς ψυχὰς ὑπὸ πλησμονῆς καὶ κόρου παχύνουσιν· "οἶνος γὰρ καὶ σαρκῶν ἐμφορήσιες σῶμα μὲν ἰσχυρὸν ποιέουσι καὶ ῥωμαλέον, ψυχὴν δὲ ἀσθενέα." καὶ ἵνα μὴ τοῖς ἀθληταῖς ἀπεχθάνωμαι, συγγενέσι χρῶμαι παραδείγμασι· τοὺς γὰρ Βοιωτοὺς ἡμᾶς οἱ Ἀττικοὶ καὶ παχεῖς καὶ ἀναισθήτους καὶ ἠλιθίους, μάλιστα διὰ τὰς ἀδηφαγίας προσηγόρευον· "οὗτοι δ' αὖ

[1] προσαπέντων Emperius: κρεοσαπέντων.
[2] δεινὰς Post: δὲ δεινάς.
[3] τῶν κρεῶν van Herwerden: τῶν δ' ἱερέων.
[4] αὐτὸν] should perhaps be deleted.
[5] Θηβαίων Bernardakis: Θηβῶν.

burial. The fact is that meat is so softened and dissolved and, in a way, predigested that it is hard for digestion to cope with it ; and if digestion loses the battle, the meats affect us with dreadful pains and malignant forms of indigestion.

6. Diogenes [a] ventured to eat a raw octopus in order to put an end to the inconvenience of preparing cooked food. In the midst of a large throng he veiled his head and, as he brought the flesh to his mouth, said, " It is for you that I am risking my life." Good heavens, a wondrous fine risk ! Just like Pelopidas [b] for the liberty of the Thebans or Harmodius and Aristogiton [c] for that of the Athenians, this philosopher risked his life struggling with a raw octopus—in order to brutalize our lives !

Note that the eating of flesh is not only physically against nature, but it also makes us spiritually coarse and gross by reason of satiety and surfeit. " For wine and indulgence in meat make the body strong and vigorous, but the soul weak." [d] And in order that I may not offend athletes, I shall take my own people as examples. It is a fact that the Athenians used to call us Boeotians [e] beef-witted and insensitive and foolish, precisely because we stuffed ourselves.[f] " These

[a] *Cf.* 956 B *supra* where the context is quite different. See also Athenaeus, 341 E : Lucian, *Vit. Auctio* 10 ; Julian, *Oration*, vi. 181 A, 191 C ff. ; Diogenes Laertius, vi. 76 ; *al.*

[b] *Cf. Life of Pelopidas*, chapters 7-11.

[c] *Cf.* Thucydides, vi. 54-59.

[d] A quotation from the medical writer Androcydes ; see *Mor.* 472 B and the note.

[e] *Cf.* Rhys Roberts, *The Ancient Boeotians*, pp. 1-5.

[f] The passage that follows is badly mutilated : it probably contained other quotations and fuller ones than the MSS. indicate.

[6] ὑπὲρ τῆς Bernardakis : ὑπέρ.

(995) σῦς . . ." καὶ ὁ Μένανδρος "οἷ[1] γνάθους ἔχουσι," καὶ ὁ Πίνδαρος "γνῶναί τ' ἔπειτα . . ." "αὔη δὲ[2] ψυχὴ σοφωτάτη" κατὰ τὸν Ἡράκλειτον· οἱ κενοὶ πίθοι[3] κρουσθέντες ἠχοῦσι, γενόμενοι δὲ πλήρεις οὐχ ὑπακούουσι ταῖς πληγαῖς· τῶν χαλκω-
F μάτων τὰ λεπτὰ τοὺς ψόφους ἐν κύκλῳ διαδίδωσιν, ἄχρις οὗ ἐμφράξῃ καὶ τυφλώσῃ τις[4] τῇ χειρὶ τῆς πληγῆς περιφερομένης ἐπιλαμβανόμενος· ὀφθαλμὸς ὑγροῦ πλεονάσαντος ἀναπλησθεὶς μαραυγεῖ καὶ ἀτονεῖ πρὸς τὸ οἰκεῖον ἔργον· τὸν ἥλιον δι' ἀέρος ὑγροῦ καὶ ἀναθυμιάσεων πλήθους ἀπέπτων ἀθρήσαντες οὐ καθαρὸν οὐδὲ λαμπρὸν ἀλλὰ βύθιον καὶ ἀχλυώδη καὶ ὀλισθάνοντα ταῖς αὐγαῖς ὁρῶμεν. οὕτω δὴ καὶ διὰ σώματος θολεροῦ καὶ διακόρου
996 καὶ βαρυνομένου τροφαῖς ἀσυμφύλοις πᾶσ' ἀνάγκη τὸ γάνωμα τῆς ψυχῆς καὶ τὸ φέγγος ἀμβλύτητα καὶ σύγχυσιν ἔχειν καὶ πλανᾶσθαι καὶ φύρεσθαι,[5] πρὸς τὰ λεπτὰ καὶ δυσθεώρητα τέλη τῶν πραγμάτων αὐγὴν καὶ τόνον οὐκ ἐχούσης.

7. Χωρὶς δὲ τούτων ὁ πρὸς φιλανθρωπίαν ἐθισμὸς οὐ δοκεῖ θαυμαστὸν εἶναι; τίς γὰρ ἂν ἀδικήσειεν ἄνθρωπον, οὕτω πρὸς ἀλλότρια καὶ ἀσύμφυλα

[1] οἷ] ὑῶν or ὄνων Meineke.
[2] αὔη δὲ W. C. H. after Hatzidakis: αὐγὴ ξηρή.
[3] οἱ κενοὶ πίθοι Reiske: ἔοικεν. οἱ πίθοι.
[4] τις added by Stephanus.
[5] φύρεσθαι Reiske: φέρεσθαι.

[a] *Cf.* the proverbial "sow and Athena" (*Life of Demosthenes*, xi. 5, 851 B and *Mor.* 803 D) and the Introduction to the *Gryllus*.

[b] Kock, *Com. Att. Frag.* iii, p. 238 (frag. 748 Koerte): the words probably mean "Who are greedy fellows."

men are swine "[a]; . . . and Menander[b] says, "Who have jaws"; and Pindar[c] "And then to learn . . ."; "A dry soul is wisest" according to Heraclitus.[d] Empty jars make a noise when struck, but full ones do not resound to blows.[e] Thin bronze objects will pass the sounds from one to another in a circle until you dampen and deaden the noise with your hand as the beat goes round.[f] The eye[g] when it is flooded by an excess of moisture grows dim and weakened for its proper task. When we examine the sun through dank atmosphere and a fog of gross vapours, we do not see it clear and bright, but submerged and misty, with elusive rays. In just the same way, then, when the body is turbulent and surfeited and burdened with improper food, the lustre and light of the soul inevitably come through it blurred and confused, aberrant and inconstant, since the soul lacks the brilliance and intensity to penetrate to the minute and obscure issues of active life.

7. But apart from these considerations, do you not find here a wonderful means of training in social responsibility? Who could wrong a human being when he found himself so gently and humanely dis-

[c] *Olympians*, vi. 89, which continues "whether we are truly arraigned by that ancient gibe, 'Boeotian swine.'" (For this interpretation see G. Norwood, *Pindar*, pp. 82 and 237.)

[d] Diels-Kranz, *Frag. der Vorsok.* i, p. 100, frag. B 118; *cf.* the note on *Mor.* 432 F.

[e] *Cf. Mor.* 721 B-D.

[f] *Mor.* 721 C-D suggests that Plutarch is talking about a single cauldron with a wave going around it rather than about a circular arrangement of tuning forks. "Sounding brass": *cf.* L. Parmentier, *Recherches sur l'Isis et Osiris* (*Mém. Acad. Roy. Belg.* ii, vol. II, 1912/13), pp. 31 ff.

[g] *Cf. Mor.* 714 D.

(996) διακείμενος καὶ πράως καὶ φιλανθρώπως; ἐμνήσθην δὲ τρίτην ἡμέραν διαλεγόμενος τὸ τοῦ Ξενοκράτους ὅτι[1] Ἀθηναῖοι τῷ ζῶντα τὸν κριὸν ἐκδείραντι δίκην ἐπέθηκαν· οὐκ ἔστι δ', οἶμαι, χείρων ὁ ζῶντα
B βασανίζων τοῦ παραιρουμένου τὸ ζῆν καὶ φονεύοντος· ἀλλὰ μᾶλλον, ὡς ἔοικε, τῶν παρὰ συνήθειαν ἢ τῶν παρὰ φύσιν αἰσθανόμεθα. καὶ ταῦτα μὲν ἐκεῖ κοινότερον ἔλεγον· τὴν δὲ μεγάλην καὶ μυστηριώδη καὶ ἄπιστον ἀνδράσι δεινοῖς,[2] ᾗ φησιν ὁ Πλάτων, καὶ θνητὰ φρονοῦσιν ἀρχὴν τοῦ δόγματος ὀκνῶ μὲν ἔτι[3] τῷ λόγῳ κινεῖν, ὥσπερ ναῦν ἐν χειμῶνι ναύκληρος ἢ μηχανὴν αἴρειν[4] ποιητικὸς ἀνὴρ ἐν θεάτρῳ σκηνῆς περιφερομένης. οὐ χεῖρον δ' ἴσως καὶ προανακρούσασθαι καὶ προαναφωνῆσαι τὰ τοῦ Ἐμπεδοκλέους· . . . ἀλληγορεῖ γὰρ ἐνταῦθα τὰς ψυχάς, ὅτι φόνων καὶ βρώσεως σαρκῶν καὶ ἀλληλοφα-
C γίας δίκην τίνουσαι σώμασι θνητοῖς ἐνδέδενται. καίτοι δοκεῖ παλαιότερος οὗτος ὁ λόγος εἶναι· τὰ γὰρ δὴ περὶ τὸν Διόνυσον μεμυθευμένα πάθη τοῦ διαμελισμοῦ καὶ τὰ Τιτάνων ἐπ' αὐτὸν τολμήματα, κολάσεις τε τούτων καὶ κεραυνώσεις γευσαμένων τοῦ φόνου, ᾐνιγμένος[5] ἐστὶ μῦθος εἰς τὴν παλιγ-

[1] ὅτι Pohlenz: καὶ ὅτι.
[2] δεινοῖς Bernardakis: δειλοῖς.
[3] ἔτι Reiske: ἐπὶ.
[4] αἴρειν Turnebus: ἐρεῖ.
[5] ᾐνιγμένος Reiske: ἀνηγμένος.

[a] See Heinze, *Xenokrates*, p. 151, frag. 99.
[b] *Phaedrus*, 245 c.
[c] The Greek is both difficult and ambiguous; perhaps "hesitates to set his ship in motion while a storm is raging."

posed toward other non-human creatures? Two days ago in a discussion I quoted the remark of Xenocrates,[a] that the Athenians punished the man who had flayed a ram while it was still alive; yet, as I think, he who tortures a living creature is no worse than he who slaughters it outright. But it seems that we are more observant of acts contrary to convention than of those that are contrary to nature. In that place, then, I made my remarks in a popular vein. I still hesitate, however, to attempt a discussion of the principle underlying my opinion, great as it is, and mysterious and incredible, as Plato [b] says, with merely clever men of mortal opinions, just as a steersman hesitates to shift his course [c] in the midst of a storm, or a playwright to raise his god from the machine in the midst of a play. Yet perhaps it is not unsuitable to set the pitch and announce the theme by quoting some verses of Empedocles.[d] . . . By these lines he means, though he does not say so directly, that human souls are imprisoned in mortal bodies as a punishment for murder, the eating of animal flesh, and cannibalism. This doctrine, however, seems to be even older, for the stories told about the sufferings and dismemberment of Dionysus [e] and the outrageous assaults of the Titans upon him, and their punishment and blasting by thunderbolt after they had tasted his blood—all this is a myth which in its inner meaning has to do with rebirth. For to

[d] The verses have fallen out, but may be, in part, those quoted *infra*, 998 c, or a similar passage.

[e] See I. M. Linforth, *The Arts of Orpheus*, chapter 5, "The Dismemberment of Dionysus," and especially pp. 334 ff., on this passage. A good illustration is the fragment of Dionysius in D. L. Page, *Greek Literary Papyri*, i (L.C.L.), pp. 538-541.

(996) γενεσίαν· τὸ γὰρ ἐν ἡμῖν ἄλογον καὶ ἄτακτον καὶ βίαιον οὐ θεῖον ἀλλὰ δαιμονικὸν ὂν[1] οἱ παλαιοὶ Τιτᾶνας ὠνόμασαν, καὶ τοῦτ' ἔστι κολαζομένους καὶ δίκην διδόντας.[2] . . .

[1] ὂν added by Reiske.
[2] κολαζομένους καὶ δίκην διδόντας Wyttenbach: κολαζομένου καὶ δίκην διδόντος.

[a] See Hesiod's etymology, *Theogony*, 209 f. For this

that faculty in us which is unreasonable and disordered and violent, and does not come from the gods, but from evil spirits, the ancients gave the name Titans,[a] that is to say, those that are punished and subjected to correction. . . .[b]

[a] "Greek equivalent of original sin" see Shorey on Plato, *Laws*, 701 c (*What Plato Said*, p. 629), *Mor.* 975 B *supra*; and Dodds, *The Greeks and the Irrational*, pp. 155 and 177.

[b] The first discourse breaks off at this point.

(996) D

ΠΕΡΙ ΣΑΡΚΟΦΑΓΙΑΣ

ΛΟΓΟΣ Β′

1. Ἐπὶ τὰ ἕωλα τῆς σαρκοφαγίας προσφάτους ἡμᾶς ὁ λόγος παρακαλεῖ ταῖς τε διανοίαις καὶ ταῖς προθυμίαις γενέσθαι. χαλεπὸν μὲν γάρ, ὥσπερ Κάτων ἔφησε, λέγειν πρὸς γαστέρας ὦτα μὴ ἐχούσας· καὶ πέποται ὁ τῆς συνηθείας κυκεών, ὥσπερ ὁ τῆς Κίρκης

E ὠδίνας τ' ὀδύνας τε κυκέων[1] ἀπάτας τε γόους τε·

καὶ τὸ ἄγκιστρον ἐκβάλλειν τῆς σαρκοφαγίας ὡς ἐμπεπλεγμένον[2] τῇ φιληδονίᾳ καὶ διαπεπαρμένον οὐ ῥᾴδιόν ἐστιν. ἐπεὶ καλῶς εἶχεν, ὥσπερ Αἰγύπτιοι τῶν νεκρῶν τὴν κοιλίαν ἐξελόντες καὶ πρὸς τὸν ἥλιον ἀνασχίζοντες ἐκβάλλουσιν ὡς αἰτίαν ἁπάντων ὧν ὁ ἄνθρωπος ἥμαρτεν, οὕτως ἡμᾶς ἑαυτῶν[3] τὴν γαστριμαργίαν καὶ μιαιφονίαν ἐκτεμόντας ἁγνεῦσαι τὸν λοιπὸν βίον· ἐπεὶ ἥ γε γαστὴρ οὐ μιαιφόνον

[1] ὠδίνας τ' ὀδύνας τε κυκέων Wilamowitz: ὠδίνας ὀδύνας κυκεών.
[2] ἐμπεπλεγμένον Stephanus: ἐμπεπλησμένον or ἐμπεπηγμένον.
[3] ἑαυτῶν Turnebus: ἑαυτούς.

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[a] *Cf.* Plutarch's introduction to the second essay on the *Fortune of Alexander* (*Mor.* 333 D).
[b] *Cf. Mor.* 131 D, 198 D; *Life of Cato Major*, 8 (340 A).

ON THE EATING OF FLESH

II

1. Reason urges us with fresh ideas and fresh zeal to attack again our yesterday's discourse [a] on the eating of flesh. It is indeed difficult, as Cato [b] remarked, to talk to bellies which have no ears. And the potion of familiarity has been drunk, like that of Circe [c]

> Commingling pains and pangs, tricks and tears [d]:

nor is it easy to extract the hook of flesh-eating, entangled as it is and embedded in the love of pleasure. And, like the Egyptians [e] who extract the viscera of the dead and cut them open in view of the sun, then throw them away as being the cause of every single sin that the man had committed, it would be well for us to excise our own gluttony and lust to kill and become pure for the remainder of our lives, since it is not so much our belly that drives us to the pollution

[c] *Odyssey*, x. 236.

[d] Perhaps a verse of Empedocles: Diels-Kranz, *Frag. der Vorsok.* i, p. 372, frag. 154 a; *cf.* Wilamowitz, *Hermes*, xl, p. 165. (Andrews prefers to adopt the reading κυκεών, "potion," assuming a verbal form, "dulls" or "blunts," in the preceding or following line.)

[e] *Cf.* Herodotus, ii. 86; Diodorus, i. 91; *Mor.* 159 B; Porphyry, *De Abstinentia*, iv. 10 (p. 244, ed. Nauck).

(996) ἐστὶν ἀλλὰ μιαινόμενον ἀπὸ τῆς ἀκρασίας· οὐ μὴν ἀλλ' εἰ καὶ ἀδύνατον νὴ Δία διὰ[1] τὴν συνήθειαν
F τὸ ἀναμάρτητον, αἰσχυνόμενοι τῷ ἁμαρτάνοντι χρησόμεθα διὰ τὸν λόγον, ἐδόμεθα σάρκας, ἀλλὰ πεινῶντες οὐ τρυφῶντες· ἀναιρήσομεν ζῷον, ἀλλ' οἰκτείροντες καὶ ἀλγοῦντες, οὐχ ὑβρίζοντες οὐδὲ βασανίζοντες· οἷα νῦν πολλὰ[2] δρῶσιν οἱ μὲν εἰς
997 σφαγὴν ὑῶν ὠθοῦντες ὀβελοὺς διαπύρους, ἵνα τῇ βαφῇ τοῦ σιδήρου περισβεννύμενον τὸ αἷμα καὶ διαχεόμενον τὴν σάρκα θρύψῃ καὶ μαλάξῃ· οἱ δ' οὔθασι συῶν ἐπιτόκων ἐναλλόμενοι καὶ λακτίζοντες, ἵν' αἷμα καὶ γάλα καὶ λύθρον ἐμβρύων ὁμοῦ συμφθαρέντων ἐν ὠδῖσιν ἀναδεύσαντες, ὦ Ζεῦ καθάρσιε, φάγωσι τοῦ ζῴου τὸ μάλιστα φλεγμαῖνον· ἄλλοι τε[3] γεράνων ὄμματα καὶ κύκνων[4] ἀπορράψαντες καὶ ἀποκλείσαντες ἐν σκότει πιαίνουσιν, ἀλλοκότοις μίγμασι καὶ καρυκείαις τισὶν αὐτῶν τὴν σάρκα ὀψοποιοῦντες.

2. Ἐξ ὧν καὶ μάλιστα δῆλόν ἐστιν, ὡς οὐ διὰ
B τροφὴν οὐδὲ χρείαν οὐδ' ἀναγκαίως ἀλλ' ὑπὸ κόρου καὶ ὕβρεως καὶ πολυτελείας ἡδονὴν πεποίηνται τὴν ἀνομίαν· εἶθ' ὥσπερ ἔρως[5] ἐν γυναιξὶν κόρον ἡδονῆς οὐκ ἐχούσαις, ἀποπειρώμενος πάντα καὶ πλανώμενος ἀκολασταίνων ἐξέπεσεν εἰς τὰ ἄρρητα[6]· οὕτως αἱ περὶ τὴν ἐδωδὴν ἀκρασίαι τὸ φυσικὸν παρελθοῦσαι καὶ ἀναγκαῖον τέλος ἐν ὠμότητι καὶ

[1] νὴ Δία διὰ Bernardakis : ἢ διὰ.
[2] πολλὰ] πολλοὶ πολλὰ van Herwerden.
[3] τε added by Bernardakis.
[4] κύκνων] χηνῶν Wyttenbach.
[5] ὥσπερ ἔρως Reiske : ὥσπερ. [6] εἰς τὰ ἄρρενα Emperius.

of slaughter ; it is itself polluted by our incontinence. Yet if, for heaven's sake, it is really impossible for us to be free from error because we are on such terms of familiarity with it, let us at least be ashamed of our ill doing and resort to it only in reason. We shall eat flesh, but from hunger, not as a luxury. We shall kill an animal, but in pity and sorrow, not degrading or torturing it—which is the current practice in many cases, some thrusting red-hot spits into the throats of swine so that by the plunging in of the iron the blood may be emulsified and, as it circulates through the body, may make the flesh tender and delicate. Others jump upon the udders of sows[a] about to give birth and kick them so that, when they have blended together blood and milk and gore (Zeus the Purifier !) and the unborn young have at the same time been destroyed at the moment of birth, they may eat the most inflamed part of the creature. Still others sew up the eyes of cranes[b] and swans,[c] shut them up in darkness and fatten them, making the flesh appetizing with strange compounds and spicy mixtures.

2. From these practices it is perfectly evident that it is not for nourishment or need or necessity, but out of satiety and insolence and luxury that they have turned this lawless custom into a pleasure. Then, just as with women who are insatiable in seeking pleasure, their lust tries everything, goes astray, and explores the gamut of profligacy until at last it ends in unspeakable practices ; so intemperance in eating passes beyond the necessary ends of nature and resorts to cruelty and lawlessness to give

[a] Pliny, *Nat. Hist.* xi. 210-211 is not quite so gruesome.
[b] Pliny, *Nat. Hist.* x. 60.
[c] Wyttenbach reasonably suggested "geese," but see Athenaeus, 131 f : 393 c-d.

(997) παρανομίᾳ ποικίλλουσι τὴν ὄρεξιν. συννοσεῖ γὰρ ἀλλήλοις τὰ αἰσθητήρια καὶ συναναπείθεται καὶ συνακολασταίνει μὴ κρατοῦντα τῶν φυσικῶν μέτρων. οὕτως ἀκοὴ νοσήσασα μουσικὴν διέφθειρεν, ἀφ' ἧς τὸ θρυπτόμενον καὶ ἐκλυόμενον αἰσχρὰς ποθεῖ[1] ψηλαφήσεις καὶ γυναικώδεις γαργαλισμούς.
C ταῦτα τὴν ὄψιν ἐδίδαξε μὴ πυρρίχαις χαίρειν μηδὲ χειρονομίαις μηδ' ὀρχήμασι γλαφυροῖς μηδ' ἀγάλμασι καὶ γραφαῖς, ἀλλὰ φόνον καὶ θάνατον ἀνθρώπων καὶ τραύματα καὶ μάχας θέαμα ποιεῖσθαι πολυτελέστατον. οὕτως ἕπονται παρανόμοις τραπέζαις συνουσίαι ἀκρατεῖς, ἀφροδισίοις αἰσχροῖς ἀκροάσεις ἄμουσοι, μέλεσι καὶ ἀκούσμασιν ἀναισχύντοις θέατρα ἔκφυλα, θεάμασιν ἀνημέροις ἀπάθεια πρὸς ἀνθρώπους καὶ ὠμότης. διὰ τοῦτο διέταττεν[2] ὁ θεῖος Λυκοῦργος ἔν τισι[3] ῥήτραις τὸ ἀπὸ πρίονος καὶ πελέκεως γίνεσθαι τὰ θυρώματα
D τῶν οἰκιῶν καὶ τὰς ἐρέψεις,[4] ἄλλο δ' ὄργανον μηδὲν προσφέρεσθαι, οὐ πολεμῶν δήπου τερέτροις καὶ σκεπάρνοις καὶ ὅσα λεπτουργεῖν πέφυκεν ἀλλ' εἰδὼς ὅτι διὰ τοιούτων ἔργων[5] οὐκ εἰσοίσεις κλινίδιον ἐπίχρυσον οὐδὲ τολμήσεις εἰς οἰκίαν λιτὴν ἀργυρᾶς εἰσενεγκεῖν τραπέζας καὶ δάπιδας ἁλουργοὺς καὶ λίθους πολυτελεῖς[6]· ἀλλ' ἕπεται μὲν[7] οἰκίᾳ

[1] ποθεῖ Turnebus : τιθεῖ.
[2] διέταττεν added by Wyttenbach.
[3] τισι W. C. H. : ταῖς τρισὶ.
[4] ἐρέψεις Xylander : τέρψεις.
[5] ἔργων] θυρῶν Emperius.
[6] ἁλουργεῖς καὶ κύλικας διαλίθους πολυτελεῖς van Herwerden.
[7] μὲν added by Benseler.

[a] See Plato, *Laws*, 816 B.

variety to appetite. For it is in their own company that organs of sense are infected and won over and become licentious when they do not keep to natural standards. Just so the art of hearing has fallen sick, corrupting musical taste. From this our luxury and debauchery conceives a desire for shameful caresses and effeminate titillations. These taught the sight not to take pleasure in warlike exercises [a] or gesticulations or refined dances or statues and paintings, but to regard the slaughter and death of men, their wounds and combats, as the most precious sort of spectacle.[b] Just so intemperate intercourse follows a lawless meal, inharmonious music follows a shameful debauch, barbarous spectacles follow shameless songs and sounds, insensitivity and cruelty toward human kind follow savage exhibitions in the theatre. It was for this reason that the godlike Lycurgus [c] gave directions in certain *rhetrae* [d] that the doors and roofs of houses should be fashioned by saw and axe alone and no other tool should be used—not of course because he had a quarrel with gimlets and adzes and other instruments for delicate work. It was because he knew that through such rough-hewn work you will not be introducing a gilded couch, nor will you be so rash as to bring silver tables and purple rugs and precious stones into a simple house. The corol-

[b] Referring to the gladiatorial combats which came to be substituted for the more refined exhibitions of an earlier age. Plutarch urges the expulsion of such practices from the State in *Mor.* 822 c; for further examples of this kind of opposition to Roman policy see H. Fuchs, *Der geistige Widerstand gegen Rom*, p. 49, n. 60.

[c] *Life of Lycurgus*, xiii. 5-6 (47 B-C); *Mor.* 189 E, 227 C, 285 C; *Comment. on Hesiod*, 42 (Bernardakis, vii, p. 72).

[d] Or "unwritten laws"; the MSS. here say "in the three *rhetrae*."

(997) καὶ κλίνῃ καὶ τραπέζῃ καὶ κύλικι τοιαύτῃ δεῖπνον ἀφελὲς καὶ ἄριστον δημοτικόν, ἀρχῇ δὲ μοχθηρᾶς διαίτης

ἄθηλος ἵππῳ πῶλος ὣς ἅμα τρέχει

πᾶσα τρυφὴ καὶ πολυτέλεια.

3. Ποῖον οὖν οὐ πολυτελὲς δεῖπνον, εἰς ὃ[1] θανατοῦταί τι ἔμψυχον; μικρὸν ἀνάλωμα ἡγούμεθα
E ψυχήν; οὔπω λέγω τάχα μητρὸς ἢ πατρὸς ἢ φίλου τινὸς ἢ παιδός, ὡς ἔλεγεν Ἐμπεδοκλῆς· ἀλλ' αἰσθήσεώς γε[2] μετέχουσαν, ὄψεως ἀκοῆς, φαντασίας συνέσεως, ἣν ἐπὶ κτήσει τοῦ οἰκείου καὶ φυγῇ τἀλλοτρίου παρὰ τῆς φύσεως ἕκαστον εἴληχε. σκόπει δ' ἡμᾶς πότεροι βέλτιον ἐξημεροῦσι τῶν φιλοσόφων, οἱ καὶ τέκνα καὶ φίλους καὶ πατέρας[3] καὶ γυναῖκας ἐσθίειν κελεύοντες ἀποθανόντας,[4] ἢ Πυθαγόρας καὶ Ἐμπεδοκλῆς ἐθίζοντες εἶναι καὶ πρὸς τὰ ἄλλα γένη[5] δικαίους. σὺ μὲν καταγελᾷς τοῦ τὸ πρόβατον μὴ ἐσθίοντος· ἀλλ' ἡμεῖς σε,[6] φήσουσι, θεασάμενοι τοῦ πατρὸς τεθνηκότος ἢ τῆς
F μητρὸς ἀποτεμόντα μερίδας καὶ τῶν φίλων ἀποπεμπόμενον τοῖς μὴ παροῦσι, τοὺς δὲ παρόντας παρακαλοῦντα[7] καὶ παρατιθέντα τῶν σαρκῶν ἀφει-

[1] ὃ Xylander: ὃ οὐ.
[2] γε Xylander: τε.
[3] πατέρας] καὶ μητέρας old editors add.
[4] ἀποθανόντας Wyttenbach: ὡς ἀποθανόντας.
[5] γένη Xylander: μέρη.
[6] σε Wyttenbach: γε.
[7] παρακαλοῦντα Kronenberg: καλοῦντα.

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[a] Semonides, frag. 5; see *Mor.* 446 E and the note.
[b] That is, "the reincarnated life."

lary of such a house and couch and table and cup is a dinner which is unpretentious and a lunch which is truly democratic ; but all manner of luxury and extravagance follow the lead of an evil way of life

As new-weaned foal beside his mother runs.[a]

3. For what sort of dinner is not costly for which a living creature loses its life ? Do we hold a life cheap ? I do not yet go so far as to say that it may well be the life[b] of your mother or father or some friend or child, as Empedocles[c] declared. Yet it does, at least, possess some perception, hearing, seeing, imagination, intelligence, which last every creature receives from Nature to enable it to acquire what is proper for it and to evade what is not. Do but consider which are the philosophers who serve the better to humanize us : those[d] who bid us eat our children and friends and fathers and wives after their death,[e] or Pythagoras[f] and Empedocles who try to accustom us to act justly toward other creatures also ? You ridicule a man who abstains from eating mutton. But are we, they[g] will say, to refrain from laughter when we see you slicing off portions from a dead father or mother and sending them to absent friends and inviting those who are at hand, heaping their

[c] As in frag. B 137 (Diels-Kranz, *Frag. der Vorsok.* i, p. 275).

[d] *Cf.* von Arnim, *S.V.F.* iii, p. 186.

[e] That is, they tell us to eat meat without compunction, because human beings are only mortal, and their souls are not reincarnated in animals.

[f] *Cf.* 993 A *supra*. The argument is somewhat weakened by the fact (certainly well known to Plutarch, *e.g. Mor.* 286 D-E) that Pythagoras placed an even more stringent taboo on beans than he did on meat.

[g] Pythagoras and Empedocles.

(997) δῶς, μή τι γελάσωμεν;[1] ἀλλὰ καὶ νῦν ἴσως ἁμαρτάνομεν, ὅταν ἀψώμεθα τῶν βιβλίων τούτων, μὴ καθαιρόμενοι χεῖρας καὶ ὄψεις καὶ πόδας καὶ ἀκοάς, εἰ μὴ νὴ Δί' ἐκείνων καθαρμός ἐστι τὸ περὶ τούτων διαλέγεσθαι, "ποτίμῳ λόγῳ," ὥς φη-
998 σιν ὁ Πλάτων, "ἁλμυρὰν ἀκοὴν ἀποκλυζομένους." εἰ δὲ θείη τις τὰ βιβλία παρ' ἄλληλα καὶ τοὺς λόγους, ἐκεῖνα μὲν Σκύθαις φιλοσοφεῖται[2] καὶ Σογδιανοῖς καὶ Μελαγχλαίνοις, περὶ ὧν Ἡρόδοτος ἱστορῶν ἀπιστεῖται[3]· τὰ δὲ Πυθαγόρου καὶ Ἐμπεδοκλέους δόγματα νόμοι τῶν παλαιῶν ἦσαν Ἑλλήνων καὶ αἱ πυρικαὶ[4] δίαιται. . . . [ὅτι πρὸς τὰ ἄλογα ζῷα δίκαιον ἡμῖν οὐδὲν ἔστι.[5]]

4. Τίνες οὖν ὕστερον τοῦτ' ἔγνωσαν;

οἳ πρῶτοι κακοεργὸν ἐχαλκεύσαντο μάχαιραν
εἰνοδίην, πρῶτοι δὲ βοῶν ἐπάσαντ' ἀροτήρων.

οὕτω τοι καὶ οἱ τυραννοῦντες ἄρχουσι μιαιφονίας.
B ὥσπερ γὰρ[6] τὸ πρῶτον[7] ἀπέκτειναν Ἀθήνησι τὸν κάκιστον τῶν συκοφαντῶν καὶ[8] δεύτερον ὁμοίως καὶ τρίτον· εἶτ' ἐκ τούτου συνήθεις γενόμενοι

[1] γελάσωμεν Bernardakis: γελάσαιμεν.
[2] φιλοσοφεῖται Reiske: φιλοσοφεῖσθαι.
[3] περὶ . . . ἀπιστεῖται should perhaps be deleted.
[4] πυρικαὶ Post: πυρία or πυρεῖα καί.
[5] ὅτι . . . ἔστι deleted by Meziriacus.
[6] ὥσπερ γὰρ Bernardakis: ὥσπερ.
[7] τὸ πρῶτον van Herwerden: τὸν πρῶτον or ἀπὸ τῶν πρώτων.
[8] καὶ] in the MSS. preceded by the words ὃς ἐπιτήδειος προσηγορεύθη, interpolated from 959 D; deleted by W. C. H.

[a] *Phaedrus*, 243 D; *cf. Mor.* 627 F, 706 E, 711 D.
[b] That is, of the two schools of philosophy mentioned above in 997 E.
[c] Plutarch seems to have confused the Black Cloaks

plates with flesh ? But as it is, perhaps we commit a sin when we touch these books of theirs without cleansing our hands and faces, our feet and ears—unless, by Heaven, it is a purification of those members to speak on such a subject as this, " washing," as Plato [a] says, " the brine from one's ears with the fresh water of discourse." If one should compare these two sets of books and doctrines,[b] the former may serve as philosophy for the Scyths and Sogdians and the Black Cloaks, whose story as told by Herodotus [c] gains no credit [d]; but the precepts of Pythagoras [e] and Empedocles were the laws for the ancient Greeks along with their diet of wheat. . . .[f] [Because there is no question of justice between us and the irrational animals.]

4. Who, then, were they who later decreed this ?

> The first to forge the highway's murderous sword,
> And first to eat the flesh of ploughing ox.[g]

This is the way, you may be sure, in which tyrants begin their course of bloody slaughters. Just as, for instance, at Athens [h] they put to death initially the worst of the sycophants, and likewise in the second and third instances ; but next, having become accustomed to bloodshed they allowed Niceratus,[i] the

(Herodotus, iv. 20, but *cf.* iv. 107) with the Issedones (iv. 26) ; and perhaps the Sogdians (iii. 93) with the Padaei (iii. 99) ; *cf.* also i. 216 and iii. 38.

[d] But this clause looks like a semi-learned addition.

[e] *Cf.* 964 E-F *supra.*

[f] There seems to be a lacuna here followed by an interpolation from chapter 6 or 7.

[g] Aratus, *Phaenomena*, 131 f. ; *cf.* Lucilius' parody in the *Palatine Anthology*, xi. 136.

[h] *Cf.* 959 D *supra* and the note.

[i] *Cf.* Xenophon, *Hellenica*, ii. 3. 39.

(998) Νικήρατον περιεώρων[1] ἀπολλύμενον τὸν Νικίου καὶ Θηραμένη τὸν στρατηγὸν καὶ Πολέμαρχον τὸν φιλόσοφον· οὕτω τὸ πρῶτον ἄγριόν τι ζῷον ἐβρώθη καὶ κακοῦργον, εἶτ' ὄρνις τις ἢ ἰχθὺς ὃς[2] εἵλκυστο· καὶ γευσάμενον οὕτω καὶ προμελετῆσαν ἐν ἐκείνοις τὸ φονικὸν[3] ἐπὶ βοῦν ἐργάτην ἦλθε καὶ τὸ κόσμιον[4] πρόβατον καὶ τὸν οἰκουρὸν ἀλεκτρυόνα· καὶ κατὰ μικρὸν οὕτω τὴν ἀπληστίαν στομώσαντες ἐπὶ σφα-
C γὰς ἀνθρώπων καὶ πολέμους καὶ φόνους προήλθομεν.[5] ἀλλ' ἐάν πῃ[6] προαποδείξῃ[7] τις, ὅτι χρῶνται κοινοῖς αἱ ψυχαὶ σώμασιν ἐν ταῖς παλιγγενεσίαις καὶ τὸ νῦν λογικὸν αὖθις γίνεται ἄλογον καὶ πάλιν ἥμερον τὸ νῦν ἄγριον, ἀλλάσσει δ' ἡ φύσις ἅπαντα καὶ μετοικίζει

σαρκῶν ἀλλογνῶτι περιστέλλουσα χιτῶνι,

ταῦτ' οὐκ ἀποτρέπει τῶν ἀνηρημένων[8] τὸ ἀκόλαστον τοῦ[9] καὶ σώματι νόσους καὶ βαρύτητας ἐμποιεῖν καὶ ψυχὴν ἐπὶ τόλμαν ὠμοτέραν[10] τρεπομένην διαφθείρειν ὅταν ἀπεθισθῶμεν[11] μὴ αἵματος ἄνευ καὶ φόνου μὴ ξένον ἑστιᾶν, μὴ γάμον ἑορτάζειν, μὴ φίλοις συγγίνεσθαι;

[1] περιεώρων Stephanus : ἑώρων.
[2] ὃς added by Post.
[3] φονικὸν Turnebus : νικῶν or νικοῦν.
[4] κόσμιον Turnebus : κοσμοῦν.
[5] προήλθομεν W. C. H. : προῆλθον.
[6] πῃ Post : μή.
[7] προαποδείξῃ Sieveking : προσαποδείξῃ.
[8] τῶν ἀνηρημένων] τὸ ἀνήμερον Stephanus.
[9] τοῦ W. C. H. : τό.
[10] τόλμαν ὠμοτέραν Haupt (*Hermes*, vi, p. 259) : πόλεμον ἀνομωτέρων.
[11] ἀπεθισθῶμεν Post : ἐθισθῶμεν.

son of Nicias, to be killed and the general Theramenes[a] and the philosopher Polemarchus.[b] Just so, at the beginning it was some wild and harmful animal that was eaten, then a bird or fish that had its flesh torn. And so when our murderous instincts had tasted blood and grew practised on wild animals, they advanced to the labouring ox and the well-behaved sheep and the house-warding cock; thus, little by little giving a hard edge to our insatiable appetite, we have advanced to wars and the slaughter and murder of human beings. Yet if someone once demonstrates that souls in their rebirths make use of common bodies and that what is now rational reverts to the irrational, and again what is now wild becomes tame, and that Nature changes everything and assigns new dwellings

> Clothing souls with unfamiliar coat of flesh[c];

will not this deter the unruly element in those who have adopted the doctrine from implanting disease and indigestion[d] in our bodies and perverting our souls to an ever more cruel lawlessness, as soon as we are broken of the habit of not entertaining a guest or celebrating a marriage or consorting with our friends without bloodshed and murder?

[a] *Cf.* Xenophon, *Hellenica*, ii. 3. 56.

[b] The son of Cephalus and brother of Lysias; a prominent character in Plato, *Republic*, i. For the circumstances of his death see Lysias' oration *Against Eratosthenes*. It is, however, somewhat unlikely that Plutarch should call Polemarchus "the philosopher" even though he appeared in the *Republic* and his philosophic bent was mentioned in the *Phaedrus* (257 B): so that, once again, we may be faced with interpolation.

[c] Diels-Kranz, *Frag. der Vorsok.* i, p. 362; Empedocles, frag. 126.

[d] *Cf. Mor.* 128 B-E.

(998) D 5. Καίτοι τῆς λεγομένης ταῖς ψυχαῖς εἰς σώματα πάλιν μεταβολῆς εἰ μὴ πίστεως ἄξιον τὸ ἀποδεικνύμενον, ἀλλ' εὐλαβείας γε[1] μεγάλης καὶ δέους τὸ ἀμφίβολον. οἷον εἴ τις ἐν νυκτομαχίαις στρατοπέδων ἀνδρὶ πεπτωκότι καὶ τὸ σῶμα κρυπτομένῳ τοῖς ὅπλοις ἐπιφέρων ξίφος ἀκούσειέ[2] τινος λέγοντος οὐ πάνυ μὲν εἰδέναι βεβαίως, οἴεσθαι δὲ καὶ δοκεῖν υἱὸν αὑτοῦ τὸν κείμενον ἢ ἀδελφὸν ἢ πατέρα ἢ σύσκηνον εἶναι· τί βέλτιον, ὑπονοίᾳ προσθέμενον οὐκ ἀληθεῖ προέσθαι τὸν ἐχθρὸν ὡς φίλον, ἢ καταφρονήσαντα τοῦ μὴ βεβαίου πρὸς πίστιν ἀνελεῖν τὸν οἰκεῖον ὡς πολέμιον; ἐκεῖνο δεινὸν φήσετε E πάντες. σκόπει δὲ καὶ τὴν ἐν τῇ τραγῳδίᾳ Μερόπην ἐπὶ τὸν υἱὸν αὐτὸν ὡς φονέα τοῦ υἱοῦ πέλεκυν ἀραμένην καὶ λέγουσαν

> ὠνητέραν δὴ τήνδ' ἐγὼ δίδωμί σοι
> πληγήν,

ὅσον ἐν τῷ θεάτρῳ κίνημα ποιεῖ, συνεξορθιάζουσα φόβῳ[3] μὴ φθάσῃ τὸν ἐπιλαμβανόμενον γέροντα καὶ τρώσῃ τὸ μειράκιον. εἰ δ' ἕτερος γέρων παρεστήκοι[4] λέγων, "παῖσον, πολέμιός ἐστιν"· ἕτερος δέ, "μὴ παίσῃς, υἱός ἐστι"· πότερον ἀδίκημα μεῖζον, ἐχθροῦ κόλασιν ἐκλιπεῖν διὰ τὸν υἱὸν ἢ τεκνοκτονίᾳ περιπεσεῖν ὑπὸ τῆς πρὸς τὸν ἐχθρὸν ὀργῆς; ὁπότε

[1] γε Reiske : τε.
[2] ἀκούσειέ an early correction : ἀκούσοι or ἀκούσει.
[3] φόβῳ van Herwerden : φόνου (or φόβῳ) καὶ δέος.
[4] παρεστήκοι van Herwerden : παρειστήκει.

5. Yet even if the argument of the migration of souls from body to body is not demonstrated to the point of complete belief, there is enough doubt to make us quite cautious and fearful. It is as though in a clash of armies by night [a] you had drawn your sword and were rushing at a man whose fallen body was hidden by his armour and should hear someone remarking that he wasn't quite sure, but that he thought and believed that the prostrate figure was that of your son or brother or father or tent-mate—which would be the better course: to approve a false suspicion and spare your enemy as a friend, or to disregard an uncertain authority and kill your friend as a foe? The latter course you will declare to be shocking. Consider also Merope [b] in the play raising her axe against her son himself because she believes him to be that son's murderer and saying

> This blow I give you is more costly yet—

what a stir she rouses in the theatre as she brings them to their feet in terror lest she wound the youth before the old man can stop her! Now suppose one old man stood beside her saying, "Hit him! He's your enemy," and another who said, "Don't strike! He is your son": which would be the greater misdeed, to omit the punishment of an enemy because of the son, or to slay a child under the impulse of

[a] *Cf.* Matthew Arnold, *Dover Beach*:
"And we are here as on a darkling plain
Swept with confused alarms of struggle and flight,
Where ignorant armies clash by night."

[b] Nauck, *Trag. Graec. Frag.* p. 500, frag. 456 from the *Cresphontes*. Aristotle, *Poetics*, xiv. 19 (1454 a 5) tells us that all turns out well: Merope recognizes her son before she can kill him; but it was a close thing, as Plutarch implies.

(998) τοίνυν οὐ μῖσός ἐστιν οὐδὲ θυμὸς ὁ πρὸς τὸν φόνον ἐξάγων ἡμᾶς οὐδ' ἄμυνά τις οὐδὲ φόβος ὑπὲρ αὐ-
F τῶν, ἀλλ' εἰς ἡδονῆς μέρος ἕστηκεν ἱερεῖον ἀνακεκλασμένῳ τραχήλῳ ὑποκείμενον, εἶτα λέγει τῶν φιλοσόφων ὁ μέν, "κατάκοψον, ἄλογόν ἐστί τι[1] ζῷον," ὁ δέ, "ἀνάσχου· τί γὰρ εἰ συγγενοῦς ἢ συνήθους[2] τινος ἐνταῦθα ψυχὴ κεχώρηκεν;" ἴσος γ', ὦ θεοί, καὶ ὅμοιος ὁ κίνδυνος ἐκεῖ,[3] ἂν ἀπειθῶ φαγεῖν κρέας ἢ κἂν[4] ἀπιστῶ φονεῦσαι τέκνον ἢ ἕτερον οἰκεῖον.

999 6. Οὐκ ἴσος δ' ἔτι καὶ[5] οὗτος ὁ ἀγὼν τοῖς Στωικοῖς ὑπὲρ τῆς σαρκοφαγίας. τίς γὰρ ὁ πολὺς τόνος εἰς τὴν γαστέρα καὶ τὰ ὀπτανεῖα; τί τὴν ἡδονὴν θηλύνοντες καὶ διαβάλλοντες ὡς οὔτ' ἀγαθὸν οὔτε προηγμένον[6] οὔτ' οἰκεῖον οὕτω περὶ τούτων[7] τῶν ἡδονῶν ἐσπουδάκασι; καὶ μὴν ἀκόλουθον ἦν αὐτοῖς, εἰ μύρον ἐξελαύνουσι καὶ πέμμα τῶν συμποσίων, μᾶλλον αἷμα καὶ σάρκα δυσχεραίνειν. νῦν δ' ὥσπερ εἰς τὰς ἐφημερίδας φιλοσοφοῦντες δαπάνην ἀφαιροῦσι τῶν δείπνων ἐν τοῖς ἀχρήστοις καὶ περιττοῖς, τὸ δ' ἀνήμερον τῆς πολυτελείας καὶ φονικὸν οὐ παραιτοῦνται. "ναί," φασίν,[8] "οὐδὲν γὰρ ἡμῖν πρὸς τὰ ἄλογα δίκαιον[9]
B ἔστιν." οὐδὲ γὰρ πρὸς τὸ μύρον, φαίη τις ἄν, οὐδὲ πρὸς τὰ ξενικὰ τῶν ἡδυσμάτων· ἀλλὰ καὶ

[1] τι W. C. H. : τὸ.
[2] συνήθους Kronenberg : θεοῦ.
[3] ἐκεῖ Reiske : ἔχει.
[4] ἢ κἂν W. C. H. : ἄν.
[5] δ' ἔτι καὶ Reiske : δέ τις.
[6] προηγμένον Stephanus : προηγούμενον.
[7] περὶ τούτων W. C. H. : πρὸς τὰ περὶ.
[8] φασίν Bernardakis : φησίν.

anger against an enemy? In a case, then, where it is not hate or anger or self-defence or fear for ourselves that induces us to murder, but the motive of pleasure, and the victim stands there under our power with its head bent back and one of our philosophers says, "Kill it! It's only a brute beast"; but the other says, "Stop! What if the soul of some relative or friend has found its way into this body?"—Good God! Of course the risk is equal or much the same in the two cases—if I refuse to eat flesh, or if I, disbelieving, kill my child or some other relative!

6. There remains yet another contention with the Stoics [a] about flesh-eating, and this is not "equal," either. For what is this great "tension" [b] on the belly and the kitchen? Why, when they count pleasure effeminate and denounce it as being neither a good nor an "advanced principle" [c] nor "commensurate with Nature," [c] are they so concerned with these pleasures? It would certainly be consistent for them, since they banish perfume and cakes from their banquets, to be more squeamish about blood and flesh. But as it is, confining as it were their philosophy to their ledgers, they economize on their dinners in trivial and needless details while they do not deprecate this inhuman and murderous item of expense. "Of course," they say, "we human beings have no compact of justice with irrational animals." [d] Nor, one might reply, have you with perfume or exotic sweetmeats either. Refrain from animals also, if you

[a] *Cf.* von Arnim, *S.V.F.* iii, pp. 91, 374.
[b] A technical term of Stoic philosophy.
[c] Further Stoic technical terms.
[d] *Cf.* 970 B *supra.*

[9] δίκαιον Stephanus: οἰκεῖον.

(999) τούτων ἀποτρέπεσθε, τὸ μὴ χρήσιμον μηδ' ἀναγκαῖον ἐν ἡδονῇ πανταχόθεν ἐξελαύνοντες.

7. Οὐ μὴν ἀλλὰ καὶ τοῦτ' ἤδη σκεψώμεθα, τὸ μηδὲν εἶναι πρὸς τὰ ζῷα δίκαιον ἡμῖν, μήτε τεχνικῶς μήτε[1] σοφιστικῶς, ἀλλὰ τοῖς πάθεσιν ἐμβλέψαντες τοῖς ἑαυτῶν καὶ πρὸς ἑαυτοὺς ἀνθρωπικῶς λαλήσαντες καὶ ἀνακρίναντες . . .

[1] μήτε . . . μήτε Bernardakis: μηδὲ . . . μηδέ.

are expelling the useless and unnecessary element in pleasure from all its lurking-places.

7. Let us, however, now examine the point whether we really have no compact of justice with animals; and let us do so in no artificial or sophistical manner, but fixing our attention on our own emotions and conversing like human beings with ourselves and weighing . . .[a]

[a] The rest is lacking.

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[The subject index makes no claim whatever to completeness, containing only what the compiler thought was interesting. A classified zoölogical index, collected systematically by A. C. Andrews, will be found on pp. 482-486. Here the animal references have been added and are probably reasonably complete.]

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